Based on
ONLINE EXAM
PATTERN

New Pattern
Reasoning

Useful For : (PRE+MAINS)
BANK PO/LIC/SSC/MBA/MCA/CLAT/C-SAT
UPSI/CDS & MANY MORE.....

PRELIM & MAINS

Topic-wise

CHAPTERS

By ALOK GUPTA

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By
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&
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GUPTA CLASSES

CONTENTS

Direction (Q 1 to 5) : The following questions are based on the five three digit numbers given below

612   589   743   468   297

1. **If two is added to the first digit of each of the numbers, how many numbers thus formed will be completely divisible by three?**
    (a) None   (b) One   (c) Two   (d) Three
    (e) Four

2. **If the position of the second and the third digits of each of the numbers are interchanged, in how many numbers thus formed will the last digit be a perfect square? ('1' is also a perfect square)**
    (a) One   (b) Two   (c) Three   (d) Four
    (e) Five

3. **What will be the resultant if the third digit of the second lowest number is divided by the second digit of the highest number?**
    (a) 4   (b) 1   (c) 6   (d) 5   (e) 2

4. **If all the digits in each of the numbers are arranged in descending order within the number, which of the following will form the highest number in the new arrangement of numbers?**
    (a) 612   (b) 589   (c) 743   (d) 468
    (e) 297

5. **If all the numbers are arranged in ascending order from left to right, which of the following will be the sum of all the three digits of the number which is second from the right of the new arrangement thus formed?**
    (a) 14   (b) 9   (c) 18   (d) 16   (e) 12

Directions (Q. Nos. 6-10) These questions are based on the following arrangement. Study it carefully and answer the questions.

T * Q L 3 % A 5 7 J H I 4 @ W E K 1 U 8 B △ N 2 9 # 6 F

6. **What will come in place of the question mark(?) in the following series based on the above arrangement."**

    TQ3, A7H, 4WK, ?
    (a) 18△   (b) UB △   (c) UBN   (d) 18N
    (e) None of these

7. **How many such symbols are there in the above arrangement, each of which is immediately**

preceded by a number and also immediately followed by a consonant?
(a) None   (b) One   (c) Two
(d) Three   (e) Mote than three

8. **If all the symbols are removed from the above arrangement which element will be seventh from the left end ?**
    (a) 5   (b) J   (c) A   (d) H
    (e) None of these

9. **Which element is third to the right of eleventh element from the right end?**
    (a) B   (b) Δ   (c) 8   (d) 2
    (e) None of the above

10. **Four of the following five are alike in a certain way based on their positions in the above arrangement and so form a group. Which is the one that does not belong to the group?**
    (a) QL%   (b) 57H   (c) I4W   (d) 18B
    (e) N2#

Directions (11-15) : Study the following information carefully and answer the question given below:

C + N % 6 $ R Ω 8 U & D Q 3 ∉ Z 9 * L # 7 M 4 @ 2 W © A B 5 X J

11. **Four of the following five are alike in a certain way based on their positions in the given arrangement and so form a group. Which is the one that does not belong to that group?**
    (a) RU ∉   (b) ZL@   (c) NR &   (d) M25
    (e) $83

12. **What should come in the place of question - mark (?) in the following series based on the given arrangement?**
    JC+ 5 N6 A 6Ω WR & ?
    (a) U & Z   (b) D 3 L   (c) R U Q   (d) @ 8 3
    (e) $ U Q

13. **Which of the following is eighth to the right of the sixteenth from the right end of the given arrangement?**
    (a) 2   (b) @   (c) A   (d) W
    (e) 4

14. **If all the symbols are dropped from the given arrangement which of the following will be**

thirteenth element from the left end of the given arrangement?

(a) M   (b) #   (c) L   (d) @

(e) 7

15. **How many such numbers are there in the above arrangement each of which is immediately preceded by a symbol and also immediately followed a letter?**

(a) None   (b) Three   (c) One   (d)Two

(e) More than three

Directions 16-20) : In each of the following questions, a group of numbers/symbols followed by five combinations of inter codes is given. You have to find out which of the combinations correctly represents the group of numbers/symbols based on the given coding system and the conditions and mark that combination as your answer.

Numbers/ Symbols :	6	*	@	4	3	&	+	#	7	9	%	2	^	5	8
Letter Code :	F	M	D	U	S	J	R	Y	A	Q	Z	L	P	C	U

Conditions :

I. If the first and the third elements are Symbols then there code are to be interchanged.

II. If an odd number is immediately followed as well as immediately preceded by a symbol then that odd number is to be coded as 'X'.

III. If the last element is an even number then the first element is to be coded as the code of that even number.

IV. If the second element is symbol then the code of that symbol is to be interchanged with the code of first element.

(Please Note : All the element have to be counted from left to right to fulfil the conditions).

16. **@ ^ 2 * 43**

(a) DPLMUS   (b) MPXDUS   (c) PDLMUS

(d) MPLDUS   (e) PDXMUS

17. **64 # % 9 &**

(a) FUYZXJ   (b) YUFZQJ   (c) FUYJXZ

(d) JUYFQZ   (e) YUFXQJ

18. *** 2 # @ 87**

(a) LMYDUA   (b) YLMDUA   (c) YLMXUA

(d) MXYDUA   (e) MLYDUA

19. **& 4 % # 27**

(a) UJZYLA   (b) JKZYLA   (c) ZUJYUA

(d) ZUJYLA   (e) JUZYLA

20. **+ 95 # 68**

(a) YQCRFU   (b) YQCYFU   (c) UQCRXU

(d) QRCYFU   (e) UQCYFU

Directions (21-25) : The following questions are based on five three-digit numbers given below:

415 764 327 542 256

21. **What will be the resultant if second digit of the lowest number and third digit of the highest number are multiplied?**

(a) 20   (b) 14   (c) 8   (d) 30

(e) 36

22. **If '1' is added to the first digit of every odd number and '2' is subtracted from the second digit of every even number, in how many numbers will a digit appear twice?**

(a) Two   (b) Three   (c) Four   (d) None

(e) One

23. **The positions of the first and the second digit of each of the numbers are interchanged. What will be the resultant if third digit of highest number thus formed is divided by the second digit of the lowest number thus formed?**

(a) 3   (b) 4   (c) 2.5   (d) 1.5

(e) 1

24. **If in each number all the digits are arranged in ascending order from left to right within the number, how many numbers thus formed will be odd numbers?**

(a) None   (b) Two   (c) One   (d) Four

(e) Three

25. **If all the numbers are arranged in ascending order from left to right, which of the following will be the sum of all three digits of the number which is third from the left?**

(a) 12   (b) 11   (c) 10   (d)13

(e) 17

2 New Pattern Coding-Decoding

LEVEL OF DIFFICULTY-1

Directions (1 to 5): In each of the following questions, a group of numbers/symbols followed by five combinations of letter codes is given. You have to find out which of the combinations correctly represents the group of numbers/ symbols based on the given coding system and the conditions and mark that combination as your answer.

Num/ Sym	^	8	$	%	6	9	£	#	5	7	+	4	2	*	3
Letters code	Z	H	J	B	T	U	M	K	P	L	A	F	Y	X	C

Conditions:

(i) If the second and the fourth elements are even numbers then their codes are to be interchanged.

(ii) If an odd number is immediately followed as well as immediately preceded by a symbol then that odd number is to be coded as '='

(iii) If the last element is a symbol then the third element is to be coded as the code for that symbol.

(iv) If the first element is an odd number then the code of that odd number is to be interchanged with the code of the fifth element.

(Please Note : All the elements have to be counted from left to right to fulfill the conditions).

1. 6 % 3 * 5 9
(a) TB = XPU (b) UB = XPT (c) TXCXPU (d) BTCXPU
(e) TB = PUX

2. 8 £ + 4 2 5
(a) HYJFMJ (b) FHAMYJ (c) HMJFYJ (d) JMUFYH
(e) HMAFYP

3. 7 % # 2 £ 9
(a) YBKLMU (b) LKYUMB (c) MBKYLU (d) MKYBLU
(e) LKYBMU

4. + 3 5 * 8 ^
(a) CAPXHZ (b) AXZCHZ (c) ACPX = Z (d) ACZXHZ
(e) CAZHXZ

5. ^ 6 5 4 # 3
(a) ZFJ = KZ (b) ZFPTKC (c) ZFKTCJ (d) ZFJTKC
(e) CFJTKZ

Direction (6 to 7) : Study the following information carefully and answer the questions given below :

The digits from 0 to 9 are coded as whon below with the exceptions that follow :

Digit	0	7	3	1	4	6	8	5	9	2
Code	R	I	M	P	B	D	H	A	T	N

Exceptions :

1. If number begins and ends with an odd digit (non-zero), then both the first and last digits are to be coded as $.

2. If a number begins and ends with an even digit (including zero), then both the first and last digits are to be coded as #.

6. What will be the code for 314926?
(a) MPBDHA (b) MPBTND (c) MPBTNA (d) $PBTN$
(e) None of these

7. 'RATHIM' represents which of the following numbers?
(a) 095873 (b) 059673 (c) 059871 (d) 059873
(e) None of the above

Direction (8 to 9) : In each of these questions a group of letters is given followed by four combinations of number/symbol numbered (a), (b), (c) and (d). Letters are to be coded as per the scheme and conditions given below. You have to find out the serial number of the combination, which represents the letter group. Serial number of that combination is your answer. If none of the combinations is correct, your answer is (e) i.e., none of these

letters	Q	M	S	I	N	G	D	K	A	L	P	R	B	J	E
Number /Symbol	7	@	4	#	%	$	6	1	2	ℑ	s	*	9	8	3

Conditions/MeleX

(i) If the first letter is a consonant and the last a vowel, both are to be coded as the code of the vowel.

(ii) If the first letter is a vowel and the last a consonant, the codes for the first and the last are to be interchanged.

(iii) If no vowel is present in the group of letters, the second and the fifth letters are to be coded as ©.

8. BKGQJN
(a) 91$7©% (b) ©9$7%© (c) 91$78% (d) %1$789
(e) 9 © $ 7©%

9. IJBRLG
(a) #89*ℑ$ (b) #89*ℑ# (c) $89*ℑ# (d) $89*ℑ$
(e) None of the above

Direction (10 to 11) : In each question below is given a group of numbers/symbols followed by five combinations of letters numbered (a), (b), (c), (d) and (e). You have to find out which of the five combinations correctly represents the group of numbers/symbols based on the following coding system and the conditions that follow sand mark the number of that combination as your answer.

letters	F	B	E	R	U	D	N	P	L	T	O	H	I	V	S
Number /Symbol	2	*	3	#	4	9	8	@	1	%	6	©	5	$	7

Conditions :

(i) If the first and the last elements are even numbers then their codes are to be interchanged.

(ii) If an odd number is immediately followed as well as preceded by a symbol then that odd number is to be coded as 'Z'.

(iii) If the last element is a symbol and the first element is an even number then their codes are as per the code of the symbol.

(iv) If the second element is a symbol and the fifth element is an odd number then their codes are as per the odd-number code.

Note : All the elements have to be counted from left to right to fulfil the conditions.

10. **873*@2**

(a) FSBEPN (b) FBSENN (c) FSEBPN (d) FSPECU

(e) FUREBN

11. **16©4*8**

(a) LOHFBN (b) LOUVBD (c) LIOBVN (d) LBOIVN

(e) LOIUBN

Directions (12 to 13) : In these questions letters are to be coded by the digits and symbols as per the scheme and conditions given below. In each question a group of letters is given followed by four combinations of digits / symbols numbered (a) , (b) , (c) and (d) , The serial number of the combination which correctly represents the letter group, is your answer. If none of the combinations is correct your answer is (e) . i.e. 'None of these',

Letters	K	E	T	J	H	I	F	A	L	U	B	M	O	R	P
Digit/Symbol Code	3	7	%	$	4	*	1	9	8	6	#	@	2	5	©

(i) If the first as well as the last letter is a vowel their codes are to be swapped.

(ii) If the first as well as the last letter is a consonant both are to be coded by ℑ.

(iii) If the first letter is as vowel and the last letter is a consonant, The vowel is to be coded by Δ and the consonant is to be coded by ↑.

12. **TARIFM**

(a) ℑ95 * 1ℑ (b) % 95 * 1@ (c) %95*1% (d) @95*1@

(e) None of these

13. **AJTKLU**

(a) 9$%386 (b) ℑ$%38ℑ (c) Δ$%38↑ (d) ↑$%38Δ

(e) None of these

Directions (14 to 15) : Study the following information to answer the given questions :

In a certain code 'her idea has merit' is written as 'fo la 'bu na', 'merit list has been displayed' is written as 'jo ke la si na'and 'her name displayed there' is written as "ya si bu zo', 'name in merit list' is written as 'naya go ke'.

14. **What does 'ke' stand for?**

(a) been (b) has (c) merit (d) name

(e) list

15. **Which of the following represents 'name has been displayed" ?**

(a) ya la ke si (b) jo si ya la

(c) si jo ke na (d) bu ya ke la

(e) ya si jo zo

Direction (16 to 18) : Study the following information to answer the given questions

In a certain code **'for profit order now'** is written as 'ho ja ye ga' **'right now for him'** is written as ga ve ja se'. place order for profit **'ga bi ho ye'** 'only in right order' is written as 've du ye zo'.

16. **What does 'bi' stand for?**

(a) profit (b) order (c) place (d) for

(e) now

17. **'fo ve du' could be a code for which of the following?**

(a) in right spirits (b) only in profit

(c) order only him (d) place in right

(e) order only now

18. **What is the code for 'profit'?**

(a) ye (b) ga (c) bi (d) ja

(e) ho

Directions (19 to 23) : Study the following information carefully and answer the questions given below :

In a certain code language,

'fly high on sky' is written as 'lk dv in bh'

'sky for birds only' is written as 'es ct lk pb'

'birds love to fly' is written as 'mo pb ry in'

'people for high fly' is written as 'bh in es sx'

(All codes are two letter codes only)

19. **Which of the following may be the probable code for 'people touch sky' in the given code language ?**

(a) es lk ry (b) sx in pb (c) lk sx mo

(d) sx lk tu (e) sx ct dv

20. **What will be the code for 'only birds fly' in the given code language ?**

(a) pb in ct (b) es lk in (c) dv pb ct

(d) in mo ry (e) Other than those given as options

21. **In the given code language, what does the code 'bh' stand for?**

(a) fly (b) on (c) sky (d) people

(e) high

22. **What is the code for 'love' in the given code language ?**

(a) Either 'pb' or in'

(b) Other than those given as options

(c) Either 'mo' or 'ry'

(d) mo

(e) ry

23. **What is the code for 'people' in the given code language?**

(a) es   (b) sx   (c) bh   (d) in

(e) Other than those given as options

Directions (24 to 25) : Study the following information carefully to answer the given questions.

In certain code language, 'IPL starts in april' is written as 'ri mo zo ka', 'IPL is all about circket" is written as 'che da tic mo ra' 'april is very fun month' is written as 'tic you ne su ka' and 'fun players starts circket' is written as 'pa su zo da'.

24. **What does 'pa' stand for?**

(a) april   (b) players   (c) Cricket   (d) IPL

(e) None of these

25. **Which of the following may be the code for 'this april all about cricket'?**

(a) che ka mo tic da   (b) che tic mo da chu

(c) che ka ra chu da   (d) mo ra tic zo da

(e) fic tic ra da zo

26. **In a certain code language, 'it is dark out side' is written as 'ha no ti ju', is it still raining 'is written as 'pa ha da no' and 'go and play outside' is written as 'su ju ye la'. How is 'dark' written in that code language?**

(a) ha   (b) ti   (c) su   (d) ye

(e) no

27. **In a certain code language, 'where are you' is written as 'pit ka ta', 'are they there' is written as 'sa da ka' and 'they may come' is written as 'da na ja'. How is 'there' written in that code language?**

(a) da   (b) sa   (c) ka

(d) Data inadequate   (e) None of the above

28. **In a certain code, the words COME AT ONCE were written as XLNVZGLMXV. In the same code, which of the following would code OK?**

(a) KL   (b) LM   (c) KM   (d) LP

(e) PL

Direction (29 to 30) : Study the given information and answer the given questions.

    In a certain code language

'dress code for meeting' is written as 'dk pd jn te'

'wear black formal dress' is written as 'pd ro ld le'

'formal meeting this weekend' is written as 'yi te le vr'

'black code this weekend' is written as 'jn vr ld yi'

(All the codes are two-letter codes)/

29. **In the given code language, what does 'le' stands for?**

(a) this   (b) formal   (c) dress   (d) black

(e) meeting

30. **In the given code language, what is the code for 'dress'?**

(a) jn   (b) ro   (c) ld   (d) pd

(e) td

31. **In a certain code 'ke pa lo ti' means 'LAMP is burning bright' and 'lo si ti ba ke' means 'bright light is from lamp' which of the following is the code for 'burning' in that language?**

(a) si   (b) pa   (c) ti   (d) ke

(e) None of these

32. **In a certain code language, 'Monday is a holiday' is written as 'sa da pa na' and 'they enjoy a holiday' is written as 'da na ta ka'. How is Monday' written in that code language ?**

(a) Sa   (b) pa   (c) sa or pa

(d) Data inadequate   (e) None of the above

Directions (33 to 37): Study the following information carefully and answer the given questions.

In a certain code language 'score the maximum marks' is written as 'pan cha ga mo', 'marks are less than' is written as 'ta ha cum pan', 'score the highest marks' is written as 'ga cha she pan' and 'less than you' is written as 'ha cum va'.

33. **What is the code for 'highest'?**

(a) she   (b) cha   (c) ha   (d) pan

(e) None of these

34. **Which of the following can be the code for 'you score maximum'?**

(a) va mo cha   (b) cha ga mo

(c) mo ga va   (d) Either (a) or (c)

(e) None ofthese

35. **'cum' is the code for**

(a) less   (b) are   (c) Either'less'or'than'

(d) marks   (e) None ofthese

36. **Which of the following is the code for 'marks'?**

(a) che   (b) pan   (c) cum   (d) ga

(e) None of these

37. **than score the less' can be coded as**

(a) cha ga ha cum   (b) ha cum ga she

(c) cha ha ga mo   (d) Can' t be determined

(e) None of these

Directions (38 to 41) : Study the following information to answer the given questions.

In a certain code, 'he is waiting there' is written as 'la pa ro ta', 'there is the train' is written as 'zo ro ji la', 'waiting at the station' is written as 'ma ta fu ji' and 'is this a station' is written as 'fu bi ro vi'.

38. **Which of the following may represent' guard is waiting?**

(a) ro ta zo   (b) ta ki ro   (c) fu zo ki

(d) ta ro ji   (e) la ma ro

39. **What is the coded for 'at'?**

(a) ma   (b) ji   (c) fu   (d) ta

(e) Cannot be determined

40. **Which of the following represents 'the train station'?**
    (a) zo la ma   (b) fu ji ta   (c) fu ji zo
    (d) ro zo fu   (e) Cannot be determined

41. **What does 'la' stand for?**
    (a) is   (b) train   (c) waiting   (d) the
    (e) there

Direction (42 to 46) : Study the given information carefully to answer the given questions.

In a certain code language, 'Cinderella shouted for rescue' is written as 'pr co ly bu' 'rescue all the bugs' is written as 'ke mt co rx' 'bugs ate all carrots' is written as 'vg rx ke sh' carrots for pretty Cinderella' is written as 'ly pr vg as' (all codes are two-letter codes only)

42. **What may be the possible code for 'shouted and ate' in the given code language?**
    (a) bu sh mt   (b) rx co gy   (c) ly rx vg   (d) gy sh as
    (e) sh gy bu

43. **What may be the possible code for 'pretty' in the given code language?**
    (a) ly   (b) pr   (c) vg   (d) as
    (e) vg or as

44. **What is the code for 'bugs' in the given code language?**
    (a) Other than those given as option
    (b) co   (c) sh   (d) Either 'co' or 'vg'
    (e) Either 'ke or 'rx'

45. **What will be the code for 'the pretty' in the given code language?**
    (a) bu rx   (b) ke as
    (c) other than those given as options
    (d) mt bu   (e) as mt

46. **In the given code language, what does the code 'pr' stand for?**
    (a) Either 'bugs' or 'shouted'
    (b) Rescue
    (c) Either 'Cinderalla' or 'for'
    (d) For   (e) Pretty

Directions (47 to 51): Study the following information to answer the given questions:

In a certain code,
'it is raining heavily today' is written as 'to ga di gi ni',
'today is make it set' is written as 'ru to ni di zi',
'come heavily it' is written as 'ga ni la', and
'is make set gone' is written as 'ru zi mu to'.

47. **What is the code for 'heavily'?**
    (a) ni   (b) ga   (c) to
    (d) la   (e) di

48. **What does the code 'ru' stand for in the given code language?**
    (a) come raining gone   (b) make
    (c) come raining it   (d) set
    (e) None of these

49. **What does the code 'mu la gi' stand for in the given code language?**
    (a) come raining gone   (b) set raining gone
    (c) come raining it   (d) some gone heavily
    (e) None of these

50. **What may the code 'ru la di' stand for in the given code language?**
    (a) make set today   (b) come heavily today
    (c) come make gone   (d) come make today
    (e) gone is come

51. **What may be the code for 'come this raining' in the given code language?**
    (a) gi la ru   (b) la gi zi   (c) jo la di   (d) jo gi la
    (e) jo gi ni

Directions (52 to 56) : Study the following information to answer the given questions:

With a certain code language,
'she is a little girl' is written as 'me bu da jo ka',
'a girl was there' is written as 'pu da sha ka',
'there exists a little tree' is written as 'me pe te sha ka', and
'little is exists' is written as 'me te bu'.

52. **What is the code for 'girl'?**
    (a) me   (b) da or ka   (c) jo   (d) da
    (e) Cannot be determined

53. **What is the code for 'is was exists'?**
    (a) te da ka   (b) bu pu te   (c) pu te me
    (d) pu jo bu   (e) Cannot be determined

54. **What does 'bu' stand for?**
    (a) is   (b) little   (c) she
    (d) is or little (e) girl

55. **What could be the code for 'she a boy'?**
    (a) sha bu ka (b) jo me pu   (c) ka jo te   (d) mu ka jo
    (e) None of these

56. **What could be the code for 'she tree there each'?**
    (a) me pu ha jo   (b) sha pe bu ut
    (c) jo ut sha pe   (d) pe jo yu te
    (e) jo sha me ka

Directions (57 to 61): Study the following information to answer the given questions:

With a certain code language,
'she opened bank account' is written as 'tu de tir um',
'bank is on the way' is written as 'tir la be co sa',
'precaution is the best' is written as 'ap fu co la', and
'the controlled on opened' is written as 'be ma la de'.

57. **What is the code for 'precaution'?**
    (a) fu   (b) la   (c) co   (d) fu or ap
    (e) Cannot be determined

58. **What is the code for 'the opened way'?**
    (a) de be tir (b) sa um co   (c) fu la ap   (d) de la sa
    (e) None of these

59. **What could 'gu co tir' stand for?**
    (a) is control on   (b) got best bank
    (c) bank is got   (d) is got account
    (e) None of these

60. What could be the code for 'best application control'?

(a) nu ma fu   (b) fu tir fd   (c) de la sa

(d) ma ap sha   (e) Either A or D

61. What does 'be' stand for?

(a) the   (b) on   (c) way

(d) bank   (e) None of these

Directions (62 to 66) : Study the following information to answer the given questions:

With a certain code language,

'police on the alert' is written as 'da po lu ri', and

'trigger the process off' is written as 'po ma mil zu', and

'police completed off process' is written as 'mil ka zu lu', and

'trigger and alert completed' is written as 'ak ka ri ma'.

62. What is the code for 'and'?

(a) ka   (b) ri   (c) ak   (d) ma

(e) Cannot be determined

63. What is the code for 'trigger on alert'?

(a) da ma ka   (b) ri mil lu   (c) ma ri da   (d) ma zu lu

(e) None of these

64. What does 'po' stand for?

(a) police   (b) process   (c) off   (d) the

(e) None of these

65. What could be the code for 'completed police pile'?

(a) mil ma ka   (b) lu jo ka   (c) de lu ri   (d) sha ka lu

(e) Cannot be determined

66. What does 'zu da ka mil' stand for?

(a) off completed alert and   (b) on process police trigger

(c) completed on off process   (d) and on off alert

(e) None of these

Direction (67 to 71) : Study the following information to answer the given questions.

In a certain code, 'a friend of mine' is written as '4916', 'mine lots of metal' is written as '3109' and 'a piece of metal' is written as '7163'.

67. '873' would mean

(a) a metal piece   (b) metal for friend

(c) piece of advise   (d) friend of mine

(e) large metal piece

68. What does '0' stand for?

(a) Mine   (b) Metal   (c) Of   (d) Lots

(e) a

69. Which of the following may represent 'a pleasure of mine'?

(a) 6309   (b) 5216   (c) 9216   (d) 3694

(e) 5041

70. What does '9' stand for?

(a) of   (b) Mine   (c) Friend   (d) Lots

(e) Metal

71. What is the code for 'piece'?

(a) 3   (b) 6   (c) 1   (d) 7

(e) Cannot be determined

Direction (72 to 76) : Study the following information to answer the given questions.

In a certain code, always to be right is written as '4 9 3 2', 'right is also just' is written as '9765', 'come to terms' is written as '138' 'terms are just' is written as '016' and always is' is written as '74'.

72. What does '6' represent in this code?

(a) terms   (b) also   (c) are   (d) is

(e) just

73. Which of the following is the code, for 'right'?

(a) 9   (b) 7

(c) 6   (d) Either 9 or 5

(e) 5

74. Which of the following represents, 'always be right terms'?

(a) 8413   (b) 2419   (c) 4389   (d) 1250

(e) 9042

75. Which of the following can be coded as '86315'?

(a) To be are just terms

(b) Right to come are terms

(c) Always also to be just

(d) Be right also is terms

(e) Also come to just terms

76. Which of the following is the code for 'come'?

(a) 0   (b) 8   (c) 1   (d) 3

(e) Either 1 or 8

Directions (77 to 81) : Study the following information to answer the given questions.

In a certain code, '8 2 9' means 'how art thou,' '9 5 8' means 'thou art good' and '1 5 8 7 3' means 'thy good and thou bad'.

77. What does 'si' stand for?

(a) was   (b) not   (c) one   (d) he

(e) case

78. What is the code for 'how good thou art'?

(a) 7 5 8 9   (b) 8 2 9 5   (c) 7 1 8 3   (d) 8 7 9 5

(e) Cannot be determined

79. Which of the following may possibly be the code for 'thou no good'?

(a) 5 0 8   (b) 7 8 0   (c) 5 0 7   (d) 7 8 0

(e) None of these

80. What is the code for 'thou'?

(a) 9   (b) 8   (c) 2   (d) 5

(e) None of these

81. What may be the possible code for 'thy'?

(a) 1 or 7   (b) 7   (c) 3   (d) 5

(e) 1 or 7 or 3

LEVEL OF DIFFICULTY-2

Directions (1 to 5): Study the following information arrangement carefully and answer the questions given below:

With a certain code language,
'alarm forest cuddle morning' is written as '%f6 !m7 #a5 @c6',
'sight fire making criticism' is written as '#c9 @f4 %s5 !m6',
'raising centre recent alarm' is written as '@c6 %r6 #a5 !r7', and
'strike arm ignoring sight' is written as '!i8 %s5 @s6 #a3'.

1. **What is the code for 'raising'?**
(a) !r7　　(b) @c6　　(c) #a5　　(d) %r6
(e) Cannot be determined

2. **What is the code for 'fire arm morning'?**
(a) @c6 !m6 %s5　　　　(b) #a3 !i8 @c6
(c) @f4 !m7 #a3　　　　(d) None of these
(e) Cannot be determined

3. **What does '@s6 %s5 !m6' stand for?**
(a) ignoring cuddle forest　　(b) sight morning arm
(c) making strike sight　　　(d) strike raising fire
(e) Cannot be determined

4. **What could be the code for 'surfeit attempt alarm'?**
(a) %a6 #a5 @s6　　　　(b) #a5 %s7 %a7
(c) %s8 #a5 @s4　　　　(d) #a5 #a3 !m4
(e) None of these

5. **What is the code for 'making centre forest'?**
(a) !m7 #a5 @c6　　　　(b) %r6 %f6 #c9
(c) !m6 @s6 #a3　　　　(d) %f6 @c6 !m6
(e) Cannot be determined

Directions (6 to 10): Study the following information to answer the given questions:

With a certain code language,
'hole create black bestows' is written as 'f $h l#b t!b f%c',
'report letters till civil' is written as 'm#c t!l u%r m$t',
'guard also failure junked' is written as 'e%j e#g p$a f!f', and
'into export every meeting' is written as 'z#e u%e p$i h!m'.

6. **What is the code for 'letters'?**
(a) u%r　　(b) m#c　　(c) t!l　　(d) m $t
(e) Cannot be determined

7. **What is the code for 'report create meeting'?**
(a) t!l u%e f$h　　　　(b) h!m u%r f%c
(c) l#b u%r m $t　　　　(d) None of these
(e) Cannot be determined

8. **What does 't!b u$l u#c' stand for?**
(a) under bestows attempt　(b) court last bestows
(c) care hole adjust　　　(d) black proud emperor
(e) Cannot be determined

9. **What will be the code for 'butter would used'?**
(a) t$r y#d e#w　　　　(b) s%b g!r e$u
(c) t!g f%b e#v　　　　(d) e$u s%b e#w
(e) None of these

10. **What does 'e$t i#b f%c' stand for?**
(a) tallest fish into　　　(b) could best earn
(c) centre told bench　　(d) ice earn calorie
(e) None of these

Directions (11 to 15): Study the following information to answer the given questions:

In a certain code,
'Jammu Haridwar Nanded Puri' is written as 'H#12 %15L $9N F@21'
'Jaipur Hyderabad Rajouri Bengaluru' is written as 'Z#24 $18P F%24 H@15'
'Majuli Udaipur Mysuru Kasaragod' is written as 'K$15 I%24 @18S K#15', and
'Nagpur Palakkad Varanasi Gwalior' is written as '@15L E@18 %21N $21T'

11. **Which is the code for 'Chennai'?**
(a) B$18　　(b) A$18　　(c) A$20　　(d) A#18
(e) Cannot be Determined

12. **What is code for 'Sitapur Saharanpur'**
(a) #27Q @20Q　　　　(b) @27Q #18Q
(c) %30Q @18Q　　　　(d) @27Q @18Q
(e) Cannot be determined

13. **What could 'Y@12　D%24' stand for?**
(a) Amritsar Faizabad　　(b) Ajmer Faizabad
(c) Amritsar Faridabad　　(d) Ajmer Faridabad
(e) Cannot be determined

14. **What is the code of 'Mangaluru Jaisalmer'?**
(a) K@24 H@18　　　　(b) K#24 H@24
(c) K#21 H$24　　　　(d) K#27 H@24
(e) Cannot be determined

15. **Which is the code for 'Ghazibad Rewari'?**
(a) $18P E%21　　　　(b) $15P E%21
(c) $@P E%24　　　　(d) $15P E#21
(e) Cannot be determined

Directions (16 to 20): Study the following information to answer the given questions:

In a certain code language,
'Enjoy the beautiful Life' is written as '11<=51 41>>11 5<<25 25>!11'
'Butterfly is so beautiful' is written as ' 5<=51 19<>39 39>!31 5<<25'
'Jani Enjoy the game' is written as ' 21><19 11<=51 41>>11 15><11'
'Life is twisted One' is written as '25>!11 19<>39 41>!9 31>=11'

16. **What is the code for the word ' twisted' ?**
(a) 41>!9　　(b) 25>!11　　(c) 31>=11　　(d) 19<>39
(e) None of these

17. The code word '21><19' represents which of the following word ?

(a) Enjoy   (b) Game   (c) Jani   (d) The

(e) None of these

18. Find the code word for 'Beautiful Butterfly' ?

(a) 5<=51 and 5<<25   (b) 11<=51 and 5<=51

(c) 41>>11 and 5<<25   (d) 5<<25 and 5<=51

(e) None of these

19. What does 'So' Stands for ?

(a) 5<<25   (b) 5<=51   (c) 39>!31   (d) 19<>39

(e) None of these

20. What is the code word for 'Can You Join' ?

(a) 9><20 5>=42 21<!29   (b) 7<<29, 51>!43, 21<!29

(c) 8<>29 51>>43 21<=29   (d) 6<!25 11>!43 21<!29

(e) None of these

Directions (21 to 25): Study the following information to answer the given questions:

In a certain code language,

'Company Arranged the meeting' is written as 22 + 4 24 + 25 5 – 24 12 + 22

'Meeting Held in Evening' is written as 12 + 22 17 – 25 17 –15 20 + 22

'Evening Boss arranged Meeting' is written as 20 + 22 23 – 10 24 + 25 12 + 22

'Arrangement done by Boss' is written as 24 + 9 21 – 20 23 – 4 23 – 10

21. The code '23–10' is the code word for

(a) By   (b) Held   (c) Evening   (d) Boss

(e) None of these

22. Find the code word for 'Meeting' ?

(a) 5–24   (b) 22+2   (c) 12+22   (d) 17–25

(e) Can't be determined

23. '24 + 25' stands for which word ?

(a) Arranged   (b) Meeting   (c) Arrangement

(d) Evening   (e) None of these

24. The code '17' stands for which letter ?

(a) M   (b) L   (c) H   (d) I

(e) Can't be determined

25. According to the given code, Find the code word of 'Turning One Round' ?

(a) 5 + 22, 7–25, 10–24   (b) 7+23, 8–22, 7+21

(c) 10 – 24, 12–22, 7+24   (d) 12–20, 11+27, 14–26

(e) None of these

Directions (26 to 30): Study the following information to answer the given questions:

In a certain code,

"ROSE MONKEY BASKET JUG" is written as '9#E, 31%Y, 26$T, 10@G'

"JOB RIGID BALL MUG" is written as '5@B, 16$L, 9#D, 10%G'

"MANGO BULB RABBIES JACKERS" is written as '6$B, 26#S, 20%O, 25@S'

"RABBIT JAMES BUG MACAQUE" is written as '26#T, 12%E, 24@S, 10$G'

26. The code for the word 'RAIN' is

(a) 8%N   (b) 8*N   (c) 18#N   (d) 16$N

(e) None of these

27. The code '9#E' denotes which of the following word?

(a) RAGA   (b) REVERSE

(c) RUPEE   (d) RACE

(e) None of these

28. Which of the following is the code for "Marker"?

(a) 24%R   (b) 26!R   (c) 28!R   (d) 24!R

(e) None of these

29. Which of the following denotes @ symbol?

(a) A   (b) M   (c) B   (d) R

(e) J

30. Which of the following is the code for 'MOUNTAIN BIG ROOM JAPAN' ?

(a) 15@E, 13#S, 5?E, 13%H

(b) 21%N, 6$G, 18#M, 20@N

(c) 19@E, 17#S, 7?E, 18%H

(d) 22%N, 10$G, 17#M, 19@N

(e) None of these

Directions (31 to 35): Study the following information to answer the given questions:

In a certain code,

'Most safety high level' is written as '8*Y, 7?L, 6#H, 6%T'

'Made in India project' is written as '9@T, 7!A, 6%E, 4!N'

'Set list new home' is written as '5*T, 6#E, 6?T, 5&W'

'Largesale post interval' is written as '6@T, 10!L, 7?E, 6*E'

(All the codes are two–letter codes only.)

31. The code for the word 'Person' is

(a) 8*E   (b) 6*N   (c) 8@N   (d) 6@E

(e) None of these

32. The code '6*E' denotes which of the following word ?

(a) Large   (b) Set   (c) Sale   (d) Home

(e) None of these

33. The code word of 'Intend' according to the given code is

(a) 8!N   (b) 6!D   (c) 8!D   (d) 6!N

(e) None of these

34. '?' denotes which letter of the given words ?

(a) P   (b) M   (c) L   (d) S

(e) H

35. According to the given code word, what will be the code for 'Leave his much peace' ?

(a) 5@E, 3#S, 5?E, 3%H   (b) 7@E, 5#S, 7?E, 6%H

(c) 9@E, 7#S, 7?E, 8%H   (d) 9#E, 5#S, 5@E, 5%H

(e) None of these

LEVEL OF DIFFICULTY-3

Directions (1 to 6): Study the following information and answer the questions that follow:

In a certain code, the symbol for 0 is # and for 1 is @. The numbers greater than 1 are to be represented using these two symbols only. The value of the symbol for 1 doubles itself every time it shifts one place to the left. Study the following examples.

'0' is written as #   '1' is written as @
'2' is written as @#   '3' is written as # @@
'4' is written as @##   '5' is written as @#@
And so on

1. What will be (@##@#@) – (@#@@)
(a) 22   (b) 32   (c) 26   (d) 30
(e) 33

2. What will be (@#@# – 1) × (@@@# – 1)
(a) @@@#@@# (b) @@#@@#@
(c) @@@@#@   (d) @@@#@#@
(e) @@@###@

3. What will be √[(@###@) + (@#@#) + (@##@##@)]
(a) 8   (b) 10   (c) 11   (d) 13
(e) 12

4. What will be the remainder of when (@@@#@#@) is divided by (@##@@)
(a) @@#   (b) @#@   (c) @##   (d) @#
(e) @@

5. What is the HCF of (@@#@@#) and (@@####)
(a) @##   (b) @@@   (c) @#@   (d) @@#
(e) None of these

6. What will be (@#@#) + (@#@@@#)
(a) 50   (b) 52   (c) 56   (d) 48
(e) 45

Directions (7 to 11): Study the following information and answer the questions that follow:

In a certain code, the symbol for 0 is # and for 1 is @. The numbers greater than 1 are to be represented using these two symbols only. The value of the symbol for 1 doubles itself every time it shifts one place to the left. Study the following examples.

'0' is written as # '1' is written as @
'2' is written as @# '3' is written as # @@
'4' is written as @## '5' is written as @#@
And so on

7. What will be (@@#@##) + (@@#) – (@@@@)
(a) 40   (b) 32   (c) 22   (d) 50
(e) 43

8. What will be (@#@) × (@@#)
(a) @@@#@ (b) @@#@#   (c) @@@@#   (d) @#@@@
(e) @@@##

9. What will be √[(@####) + (@##@)] + (@##@##@)
(a) 80   (b) 62   (c) 72   (d) 84
(e) 78

10. What will be the remainder of when (@@@@@@@) is divided by (@##@@)
(a) @@@@   (b) @@#@   (c) @##@   (d) @@##
(e) @#@#

11. What is the HCF of (@@@@#) and (@@#@@#)
(a) @##   (b) @@@   (c) @#@   (d) @@#
(e) None of these

Directions (12 to 16): Study the following information and answer the questions that follow:

In a certain code, the symbol for 0 is # and for 1 is @. The numbers greater than 1 are to be represented using these two symbols only. The value of the symbol for 1 doubles itself every time it shifts one place to the left. Study the following examples.

'0' is written as # '1' is written as @
'2' is written as @# '3' is written as # @@
'4' is written as @## '5' is written as @#@
And so on

12. What will be @#@## written as?
(a) 40   (b) 32   (c) 22   (d) 20
(e) 16

13. What will be the multiplication of #@#@ and @##@@@?
(a) 207   (b) 187   (c) 146   (d) 123
(e) 195

14. What will the LCM of @#@# and @#@@@#?
(a) 290   (b) 245   (c) 212   (d) 230
(e) 254

15. What will be the addition of #@#@@ and @@#@?
(a) @##@   (b) @@###   (c) @#@##   (d) @#@@
(e) #@@#@

16. What will be remainder when @@##@ will be divided by @##@?
(a) @#@   (b) @##   (c) @@@   (d) #@@
(e) #@#

Directions (17 to 19): Symbol represents certain time in a clock as:-

&- Either the hour or minute hand of clock on 9.
$- Either the hour or minute hand of clock on 5.
#- Either the hour or minute hand of clock on 8.
@- Either the hour or minute hand of clock on 12.
%- Either the hour or minute hand of clock on 6.

Example- Time #% represent 8 hour 30 minutes. All time are in A.M. First symbol represents the hours and second symbol represents the minutes.

17. An train has to reach the Lucknow station at &&, but it reaches 45 minutes earlier. Then the time at which train reaches the Lucknow station?
(a) #@   (b) &@   (c) %@   (d) @%
(e) None of these

18. **My goods are scheduled to arrive at Mumbai at &#, it takes 2 hrs 40 minutes to reach Mumbai from Kolkata. at what time it should depart from Kolkata to arrive at Mumbai one hrs before scheduled time?**
(a) $# (b) &@ (c) $@ (d) @&
(e) #@

19. **I daily wake up at #$ am. My mother has to arrive station at %$ am , so i have to wake up $ minutes before her arrives. Then at what time I have to wake up today?**
(a) $@ (b) &# (c) #$ (d) @#
(e) $@

Directions (20 to 22) : The following symbols represent time in a clock as:$ – Either the hour or minute hand of clock on 9

#– Either the hour or minute hand of clock on 7
% – Either the hour or minute hand of clock on 6
@ – Either the hour or minute hand of clock on 8
© – Either the hour or minute hand of clock on 2

All the times are in AM. The first symbol represents hours and second symbol represents minutes.

Example: Time '@# 'represents 8 hours 35 minutes.

20. **A boy reaches his school at time '@%'. If he gets late by 40 minutes, then what is the time at when he reaches the school?**
(a) $% (b) $@ (c) ©$ (d) #%
(e) $©

21. **A school bus is scheduled to starts at '#$' from the bus stand. If the boy reached the bus stand 10 minutes before the scheduled time of the bus, then at what time the boy has reached the bus stand?**
(a) #@ (b) @© (c) ## (d) @$
(e) None of these

22. **A teacher has to catch a school bus, which is scheduled to starts at '@%' from bus stand. If the time to reach the bus stand from teacher's home is 1 hour and 45 minutes, then at what time should she leave from her home to get there at the bus stand at least 15 minutes before leaving of the school bus?**
(a) %$ (b) #© (c) #% (d) %%
(e) %@

PRACTICE-SET

1. **If the sentence 'you must go early to catch the train' is coded as 'early catch train must to go the you', what will be code fore the sentence 'morning exercise will help you to keep fit'?**
(a) help to fit you exercise will keep morning
(b) help to fit exercise you will keep morning
(c) will help to fit you exercise keep morning
(d) will fit to exercise you help keep morning
(e) None of the above

2. **In a certain code language, 'go for morning walk' is written as '$*?#', 'good for health' is written as '?@' and 'good to walk fast' is written as '+@↑#', then what is the code for 'health' in that language?**
(a) ट (b) ? (c) # (d) +
(e) None of these

3. **If in a certain code language, 'pen pencil' is written as '$ट;' 'eraser sharpener' is written as @ #' and 'pencil eraser' is written as '$ @', then what is the code fore 'pen'?**
(a) ट (b) @ (c) $ (d) #
(e) None of these

Directions (4 to 6): Symbol represents certain time in a clock as:-

&- Either the hour or minute hand of clock on 9
$- Either the hour or minute hand of clock on 5
#- Either the hour or minute hand of clock on 8
@- Either the hour or minute hand of clock on 12

%- Either the hour or minute hand of clock on 6

Example- Time #% represent 8 hour 30 minutes. All time are in A.M. First symbol represents the hours and second symbol represents the minutes.

4. **An train has to reach the Lucknow station at &&, but it reaches 45 minutes earlier. Then the time at which train reaches the Lucknow station?**
(a) #@ (b) &@ (c) %@ (d) @%
(e) None of these

5. **My goods are scheduled to arrive at Mumbai at &#, it takes 2 hrs 40 minutes to reach Mumbai from Kolkata. at what time it should depart from Kolkata to arrive at Mumbai one hrs before scheduled time?**
(a) $# (b) &@ (c) $@ (d) @&
(e) #@

6. **I daily wake up at #$ am, but total my mom arrive station at %$ am , so i have to wake up $ minutes before her arriving. that what time i have to wake up today?**
(a) $@ (b) &# (c) #$ (d) @#
(e) $@

Directions (7 to 11): Study the following information to answer the given questions:

In a certain code,
'make the one happy' is written as 'de sik vbh gi',
'happy is one girl' is written as 'asz gi ha sik',

'the girl is sweet' is written as 'ha jo de asz', and
'one is seeking attention' is written as 'sbn sik ti asz'.

7. **What is the code for 'happy'?**
   (a) vbh   (b) de   (c) gi
   (d) ha   (e) asz

8. **What does 'asz' stand for?**
   (a) girl   (b) sweet   (c) one
   (d) is   (e) attention

9. **'asz lo de' could be a code for which of the following?**
   (a) girl is action   (b) the is sense
   (c) happy is girl   (d) the one attention
   (e) make seeking happy

10. **What is code for 'one'?**
   (a) sbn   (b) sik   (c) ti
   (d) asz   (e) de

11. **Which of the following may represent 'sweet make seeking'?**
   (a) jo sbn ti   (b) sbn ti sik   (c) vbh jo sik
   (d) ti vbh jo   (e) vbh ti de

Directions (12 to 16): Study the following information to answer the given questions:

In a certain code,
'work key to success' is written as 'lif sa fo nio',
'smart key to job' is written as 'nio sha lif de',
'success lead to work' is written as 'lif os sa ki', and
'smart lead with happy' is written as 'jo va ki de'.

12. **Which is the code for 'success'?**
   (a) fo   (b) lif   (c) os
   (d) sa   (e) ki

13. **What does 'sha lif fo' stand for?**
   (a) work success job   (b) work to success
   (c) lead smart job   (d) work to job
   (e) None of these

14. **Which is the code for 'smart happy with'?**
   (a) ki jo va   (b) jo sha lif   (c) jo de va
   (d) sa va de   (e) None of these

15. **What does 'nio' mean in the given code language?**

   (a) to   (b) key   (c) work
   (d) success   (e) Can't with determined

16. **Which could be the code for 'lead key code'?**
   (a) fo os ki   (b) ki nio nib   (c) os lif nio
   (d) sa lif sd   (e) ki jo ki

Direction (17 to 21) : Study the information below and answer the following question: –

In a certain code language,
'CAT DONKEY FAN EARTH' is written as "*1@7, !1&9, ~1@1, #0%3"
'COW DULL FOREST ELBOW' is written as "*2@0, #1%8, !0^8, ~1&4"
'CAN DOORS FOUR ELEVEN' is written as "~1^4, !1%4, *1@1, #0&8"
'FAMILY CAR EAGER EGG' is written as "#0@4, *1@5, ~1&9, #1%3"

17. **Which of the following is the code for "FAMILY"?**
   (a) ~1&9   (b) *1@5   (c) 10*15   (d) 14$4
   (e) None of these

18. **Which of the following denotes # symbol?**
   (a) C   (b) D   (c) E   (d) F
   (e) None of these

19. **Which of the following denotes @ symbol?**
   (a) C   (b) D   (c) E   (d) F
   (e) None of these

20. **The code '~1^4' denotes which of the following word?**
   (a) DULL   (b) CAT   (c) FAN   (d) FOUR
   (e) None of these

21. **By using the given code word, find the code word for 'FUN**
COOL EARLY DIESEL'?
   (a) #0!4, *1@5, ~4&9, #1%3
   (b) #2@4, *1&8, ~3&9, #1%9
   (c) #0@4, *0@5, ~2&9, #1%8
   (d) #2@4, *0@5, ~1&9, #1%6
   (e) #2%0, *0^8, ~1@1, !0&6

3 New Pattern Coded-Inequality

LEVEL OF DIFFICULTY-1

Directions (1 to 5) : In each of the following questions, relationship between different elements is shown in the statements. The statements are followed by two Conclusions numbered I and II. Study the Conclusions based on the given statements (s) and select the appropriate answer.

Give answer (a) if neither Conclusion I nor Conclusion II is true.

Give answer (b) if either Conclusion I or Conclusion II is true

Give answer (c) if only Conclusion II is true

Give answer (d) if only Conclusion I is true

Give answer (e) if both the Conclusion I and Conclusion II are true

1. **Statements**
   $R = A > H \geq U$; $H < S$
   Conclusions
   I. $U < R$ II. $A < S$

2. **Statements**
   $F > H = Q \leq K < X$
   Conclusions
   I. $F > K$ II. $X > H$

3. **Statements**
   $V < I \leq Z$; $D > I \geq B$
   Conclusions
   I. $B > V$ II. $Z < D$

4. **Statements**
   $J \geq X = T \geq O > N$
   Conclusions
   I. $O \leq J$ II. $T > N$

5. **Statements**
   $I \geq S \geq P = N$
   I. $N = 1$ II. $I > N$

Directions (6 to 10) : In each of the following questions, relationship between different elements is shown in the statements. The statements are followed by two Conclusions numbered I and II. Study the Conclusions based on the given statement (s) and select the appropriate answer:

Give answer (a) If both the Conclusion I and conclusion II are true

Give answer (b) If either Conclusion I or Conclusion II is true

Give answer (c) If only Conclusion I is true

Give answer (d) If only Conclusion II is true

Give answer (e) If neither Conclusion I nor Conclusion II is true

6. **Statements :**
   $F < R < L \leq S > O$
   Conclusions :
   I. $F < S$ II. $O > R$

7. **Statements :**
   $U \leq C = N < Q \geq J$
   Conclusions :
   I. $Q > U$ II. $C < J$

8. **Statements :**
   $G \geq R = O \geq W$
   Conclusions :
   I. $G > W$ II. $W = G$

9. **Statements :**
   $K > E \geq R = A$; $E < B$
   Conclusions :
   I. $K \geq A$ II. $A < B$

10. **Statements :**
    $D = O < L \leq P > H$
    Conclusions :
    I. $P < D$ II. $O > H$

Directions (11 to 15) : In each of the following questions, relationship between different elements is shown in the statements. The statements are followed by two Conclusions numbered I and II. Study the Conclusions based on the statements and mark the appropriate answer.

Give answer (a) If both the Conclusion I and Conclusion II are true

Give answer (b) If either Conclusion I or Conclusion II is true

Give answer (c) If neither Conclusion I nor Conclusion II is true

Give answer (d) If only Conclusion I is true

Give answer (e) If only Conclusion II is true

11. **Statements :**
    C = L > E ≥ R ≥ K
    Conclusions :
    I. R < C   II. L > K
12. **Statements :**
    O > N = L < Y ; L ≤ P
    Conclusions :
    I. O > Y   II. P < O
13. **Statements**
    L = I ≥ M ≥ E
    Conclusions :
    I. L > E   II. E = L
14. **Statements :**
    E > Q ≤ U = T ≤ M
    Conclusions :
    I. E > T   II. M ≥ Q
15. **Statements :**
    F ≤ A < T ≥ H > E
    Conclusions :
    I. F < T   II. A > E

Directions (16 to 20) : In each of the following questions, relationship between different elements is shown in the statements. The statements are followed by two conclusions numbered I and II. Study the Conclusions based on the given statements and select the appropriate answer.

Give answer (a) If neither Conclusion I nor Conclusion Ii is true

Give answer (b) If only Conclusion I is true

Give answer (c) If both the Conclusion I and Conclusion II are true

Give answer (d) If only Conclusion II is true

Give answer (e) If either Conclusion I or Conclusion II is true

16. **Statement :**
    F ≤ L < U = K ≥ E
    Conclusions :
    I. U ≥ E   II. F < K
17. **Statement :**
    B ≥ O ≥ N < K ≤ R; N ≥ F
    Conclusions :
    I. O < R   II. F ≤ B
18. **Statement :**
    C ≤ D = E > F ≥ G
    Conclusions :
    I. C ≤ F   II. G ≥ D
19. **Statement :**
    L > A ≥ M > P; R ≤ A ≤ N
    Conclusions :
    I. M ≤ N   II. P > R

20. **Statement :**
    P ≤ Q ≤ R = S ≤ T
    Conclusions :
    I. P = T   II. P < T

Directions (21 to 25) : In these questions, relationship between different elements is shown in the statements. The statements are following by two conclusions numbered I and II. Study the Conclusions based on the given statements and select the appropriate answer:

Give answer (a) If only Conclusion I is true

Give answer (b) If only Conclusion II is true

Give answer (c) If either Conclusion I or Conclusion II is true

Give answer (d) If neither Conclusion I nor Conclusion II is true

Give answer (e) If both the Conclusion I and Conclusion II are true

21. **Statement :**
    C ≥ D > E = M < J = L
    Conclusions :
    I. L < E   II. C ≥ J
22. **Statement :**
    P = N ≤ Q > R > T = S
    Conclusions :
    I. N ≥ S   II. P ≤ Q
23. **Statement :**
    J ≥ P = I ≥ M < T ≥ V > H
    Conclusions :
    I. M ≤ J   II. H ≤ M

Directions (24 to 25) : In these questions, a relationship between different elements is shown in the statement (s). The statements are followed by two conclusions numbered I and II. Study the Conclusions based on the statements and mark the appropriate answer.

Give answer (a) If only Conclusion I is true

Give answer (b) If only Conclusion II is true.

Give answer (c) If either Conclusion I nor II is true.

Give answer (d) If neither conclusion I nor II is true.

Give answer (e) If both Conclusion I and II are true.

Statement :
Q ≤ X ≤ E > F = D < O < K = G

24. **Conclusions :**
    I. D > Q   II. K ≤ E
25. **Conclusions :**
    I. Q ≤ E   II. G > F

Directions (26 to 30) : In these questions, a relationship between different elements is shown in the statement (s). The statements are followed by two conclusions numbered I and II. Study the Conclusions based on the statements and mark the appropriate answer.

Give answer (a) If only Conclusion I is true

Give answer (b) If only Conclusion II is true.

Give answer (c) If either Conclusion I nor II is true.

Give answer (d) If neither conclusion I nor II is true.

Give answer (e) If both Conclusion I and II are true.

26. Statements :

A > B ≥ C < D; C = E > G

Conclusions :

I. D > E II. B ≥ E

27. Statements :

P ≥ Q > M ≥ N; Q = S

Conclusions :

I. S > P II. N < S

28. Statements :

S> M = Z > T < Q > V

Conclusions :

I. V = S II. Q > M

29. Statements :

T < U = V ≤ S > P ≥ Q

Conclusions :

I. S > T II. V ≤ Q

30. Statements :

M ≥ N > R > W; E = J > L ≥ W

Conclusions :

I. E > W II. M > L

Directions (31 to 35) : In these questions, relationship between different elements is shown in the statements. The statements are followed by conclusions.

(a) If only conclusion I is true

(b) If only conclusion II is true

(c) If either conclusion I or II is true

(d) If neither conclusion I nor II is true

(e) If both conclusions I and II are true.

31. Statements

P > N > Q; Q > Z > M

Conclusions

I. M ≥ Z II. N < P

32. Statements

A < B < C ≤ D = E

Conclusions

I. B ≤ E II. B < E

33. Statements

H < J; F < H, I ≤ J = K

Conclusions

I. H > I II. I ≥ F

34. Statements

A > B; B = H; H > G

Conclusions

I. A > G II. A > H

35. Statements

L > M; M > N; N > P

Conclusions

I. L > P II. M > P

Directions (36 to 40) : In these questions, relationship between different elements is shown in the statements. The statements are followed by conclusions.

Give Answer

(a) If only conclusion I is true

(b) If only conclusion II is true

(c) If either conclusion I or II is true

(d) If neither conclusion I nor II is true

(e) If both conclusions I and II are true

36. Statements

L = M ≥ N; M > P; L < K

Conclusions

I. K > P II. N > K

37. Statements

U > A = I ≤ O < E

Conclusions

I. I ≤ E II. O > U

38. Statements

A ≤ B ≤ C; A ≥ D; C ≤ F

Conclusions

I. D < C II. F ≥ D

39. Statements

P < Q = R ≥ S ≥ T

Conclusions

I. T ≤ Q II. R > P

40. Statements

F ≥ G = H; G > J ≥ K

Conclusions

I. F ≥ K II. K < H

LEVEL OF DIFFICULTY-2

Directions (1 to 5) : In the following questions, the symbol @, ©, *, $ and # is used with the following meaning:

'A © B' means 'A is not smaller than B'.

'A * B' means 'A is not greater then B'.

'A @ B' means 'A is neither smaller than nor equal to B'.

'A $ B' means 'A is neither smaller than nor greater than B'.

'A # B' means 'A is neither greater than nor equal to B'.

1. **Statements: Z#N, F©N, F*K**

Conclusion:

I. K $ N   II. K @ Z   III. K © N

(a) Only II   (b) Only I and II

(c) Only III   (d) Only II and III

(e) None of these

2. **Statements: D $ T, T©M, M # K**

Conclusions:

I. M $ D   II. D@ M   III. K @ T

(a) I only   (b) I and II only

(c) Either I or II only   (d) All I,II and III

(e) None follows

3. **Statements: W©A, B*A, B@M**

Conclusions:

I. B # W   II. W $ B   III. W @ M

(a) Only either I or II   (b) Only III

(c) Only I & II   (d) All I, II & III

(e) Only either I or II and III

4. **Statements: J * M, M $ N, N # T**

Conclusions:

I. T @ J   II. T $ J   III. T @ M

(a) Only I and II   (b) Only II and III

(c) Only I and III   (d) None follows

(e) None of these

5. **Statements:** V * F, F @ R, R © G

Conclusions:

I. G # V   II. G@ V   III. V @ R

(a) Only I and II   (b) Only II and III

(c) Only I and III   (d) None follows

(e) None of these

Directions (6 to 10) : In the following questions, the symbols $, ©, ×, @ and # are used with the following meanings:

1) P $ Q means P is not smaller than Q.

2) P © Q means P is neither greater than nor smaller than Q.

3) P @ Q means P is not greater than Q.

4) P × Q means P is neither smaller than nor equal to Q.

5) P # Q means P is neither greater than nor equal to Q.

6. **Statements: Z$K, K × T, T©F**

Conclusions:

I. F # Z   II. Z × T   III. K x T

(a) Only II   (b) Only I and II

(c) Only III   (d) Only II and III

(e) All follows

7. **Statements: K × B, B @ D, D # K**

Conclusions:

I. B @ K   II. B # K   III. K x D

(a) Only II   (b) Only I and II

(c) Only III   (d) Only II and III

(e) None of these

8. **Statements: N©R, R@M, M$J**

Conclusions:

I. N © M   II. N # M   III. R x J

(a) Only either I or II   (b) Only III

(c) Only I & II   (d) All I, II & III

(e) Only either I or II and III

9. **Statements: S $ T, T@R, R # M**

Conclusions:

I. M × T   II. R × S   III. M © T

(a) None follows   (b) Only I

(c) Only II   (d) Only III

(e) Only II & III

10. **Statements: H@V, V©M, M × R**

Conclusions:

I. R × H   II. H × R   III. H x M.

(a) None follows   (b) Only I

(c) Only II   (d) Only III

(e) Only II & III

Directions (11 to 15) : IN the following questions, the symbols +, ×, =, ÷ and − are used with the following meaning :

P + Q means P is greater than Q.

P × Q means P is either greater than or equal to Q.

P = Q means P is equal to Q.

P ÷ Q means P is smaller than Q.

P — Q means P is either smaller than or equal to Q.

Now in each of the following questions assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true. Give answer

(1) If only conclusion I is true.

(2) If only conclusion II is true.

(3) If either I or II is true.

(4) If neither I nor II is true.

(5) If both I and II are true.

11. **Statements :** U+V, W —Y, Y × U
    Conclusion : I. $W + U$ II. $W \div V$

12. **Statements :** $B \div A, D \times E, E + A$
    Conclusion : I. $D + A$ II. $B \div E$

13. **Statements :** $S \times Q, R + T, R - S$
    Conclusion : I. $S + T$ II. $Q = T$

14. **Statements :** $M \div N, P \times Q, P + N$
    Conclusions : I. $S + T$ II. $N - Q$

15. **Statements :** $G - H, K \times L, L - G$
    Conclusions : I. $G \div K$ II. $L - H$

Directions (16 to 19) : In the following questions the symbols @, c, Ȼ, ? and $ are used with the following meanings :

A @ B means A is neither equal to nor smaller than B.

A c B means A is neither greater nor smaller than B.

A Ȼ B means A is either smaller or equal to B.

A ? B means A is neither greater than nor equal to B.

A $ B means A is either greater or equal to B.

Now, in each of the following questions, assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true. Give answer

(1) if only conclusion I is true

(2) If only conclusoin II is true.

(3) If either I or II is true

(4) Is neither I nor II is true

(5) If both I and II are true

16. **Statements :** $N ? S, S @ P, P Ȼ M$
    Conclusions : I. $S @ M$ II. $P c N$

17. **Statements :** $J c P, P \$ N, J Ȼ H$
    Conclusions : I. $J c N$ II. $H @ P$

18. **Statements :** $Z @ D, F c D, F \$ G$
    Conclusions : I. $D c G$ II. $Z @ G$

19. **Statements :** $L @ T, P ? T, K \$ L$
    Conclusions : I. $L @ P$ II. $K @ T$

Directions (20 to 29) : In the following questions, the symbols %, @, #, $ and * are used with the following meaning as illustrated below:

'P # Q' means 'P is neither smaller than nor equal to Q'.

'P * Q' means 'P is neither greater than nor equal to Q'.

'P $ Q' means 'P is not greater than Q'.

'P % Q' means 'P is not smaller than Q'.

'P @ Q' means 'P is neither smaller than nor greater than Q'.

In each of the following questions, mark answer according to above symbols and their meaning.

20. **Which of the following does not make A # C and D $ F definitely not true?**
    (a) A % B # C @ D $ E $ F   (b) A # B @ C $ D $ E @ F
    (c) A % B # C @ D $ E * F   (d) A % B # C # D @ E $ F

21. **Which of the following makes C $ E or B % E definitely true?**
    (a) A * B $ C @ D % E # F   (b) A # B * C $ D @ E # F
    (c) A # B # C % D % E * F   (d) A @ B % C @ D * E * F

22. **If "A % B % C * D @ E $ F" is true then which of the following is definitely not true?**
    (i) A # D   (ii) C * F   (iii) B # D   (iv) D # F
    (a) Only (i)   (b) Only (ii) and (iv)   (c) Only (iv)
    (d) Only (i), (iii) and (iv)   (e) All are true

23. **Which of the following makes A * C and E # B definitely true?**
    (a) A * B $ C @ D % E # F   (b) A * D $ B * C @ E # F
    (c) A * B # C % D * E $ F   (d) A @ B * D @ C % E @ F

24. **What will come in place of blank in following below such that both A % D and C # F are definitely true? A % B % C _ D # E % F**
    (i) @   (ii) *   (iii) %   (iv) $
    (a) Only (i)   (b) Only (ii) and (iv)
    (c) Only (i) and (iii)   (d) Only (i), (iii) and (iv)
    (e) All are true

25. **What will come in place of blank in following below such that both B * E and F # B are definitely true? A @ B $ C _ D @ E * F $ G**
    (a) @   (b) *   (c) #   (d) $
    (e) None of these

26. **Which of the following makes F # D $ B definitely true?**
    (a) A @ B $ C * D # E * F   (b) A * B @ C % D # E * F
    (c) A % B * C $ D @ E * F   (d) A # B % C @ D * E * F

27. **What will come in place of blank in following below such that both B *% E and D $ G are definitely true? A # B @ C % D _ E $ F @ G**
    (a) %   (b) *   (c) #   (d) $
    (e) @

28. **Which of the following is definitely true if A # B @ C # D @ E $ F is true?**
    (i) C # F   (ii) F % D   (iii) B % E   (iv) E # (a)
    (a) Only (i)   (b) Only (ii) and (iii)   (c) Only (iv)
    (d) Only (ii)   (e) Only (i), (ii) and (iii)

29. **Which of the following does not make A % B and D * F definitely not true?**
    (a) A % B % C * D $ E # F   (b) A % B % C @ D * E * F
    (c) A * B % C @ D $ E $ F   (d) A % B @ C $ D @ E * F

Directions (30 to 34) : In the following questions, the symbols @, #, %, $ and © are used with the following meaning as illustrated below:

'P @ Q' means 'P is neither smaller than nor equal to Q'.

'P # Q' means 'P is neither greater than nor equal to Q'.

'P % Q' means 'P is not greater than Q'.

'P $ Q' means 'P is not smaller than Q'.

'P © Q' means 'P is neither smaller than nor greater than Q'.

In each of the following questions, mark answer according to above symbols and their meaning.

30. Which of the following does not make P @ S and V # S definitely not true?
(a) P @ Q © R $ S $ T @ U © V
(b) P $ Q @ R @ V # T © S % U
(c) P # Q % R © S $ T © U $ V
(d) P © Q @ R © S @ T $ U © V
(e) None of these

31. What will come in place of blank in following below such that both P @ S and V % R are definitely true?
P $ Q @ R _ S $ T © U $ V
(i) @   (ii) ©   (iii) %   (iv) $
(a) Only (i)
(b) Either (i) or (iii)
(c) Either (i) or (ii) or (iv)
(d) Either (ii) or (iv)

(e) All are true

32. Which of the following makes C $ E or B % E definitely true?
(a) A © B $ C @ D % E # F
(b) A # B % C $ D @ E # F
(c) A # B © C % D % E $ F
(d) A @ B % C © D # E @ F
(e) None of these

33. If "A % B # C © D @ E © F $ G" is true then which of the following is definitely not true?
(i) A # D   (ii) C © F   (iii) B @ D   (iv) E % G
(a) Only (i)
(b) Only (ii) and (iv)
(c) Only (ii) and (iii)
(d) Only (i), (iii) and (iv)
(e) All are true

34. Which of the following makes A $ C and E # B definitely true?
(a) A $ B $ C @ D % E # F
(b) A $ D $ B @ C @ E # F
(c) A © B # C % D @ E $ F
(d) A © B $ D © C @ E @ F
(e) None of these

PRACTICE SET

1. If the expressions, R < P and Q ≥ T are true, then which of the following symbols should be placed in the blank spaces respectively in the given expression?
R _ P > N = T _ Q
(a) >, ≥   (b) ≤,<   (c) <, ≤   (d) >, ≥
(e) ≤, ≥

2. Which of the following expressions is not necessarily true, if the given expression is true?
S > T ≥ R > P = N ≤ O > Q
(a) S > P   (b) T > N   (c) T > P   (d) P > Q
(e) None of.these

3. Which of the following symbols should be placed in the blank spaces respectively to make the expressions T > O, R ≤ O and S < R definitely true?
O_S_R_T
(a) <,>,<   (b) <, <, ≤   (c) >,>,<   (d) <, ≤, >
(e) None of these

4. Which of the following expressions is true, if the given expression is true?
B < U ≤ E > V ≥ L
(a) L < E   (b) L > B   (c) L ≥ E   (d) U > V
(e) None of these

5. If the expression R ≥ V and P < Q are true, then which of the following symbols should be placed in the blank spaces respectively in the given expression?
Q _ R ≥ N = P _ V
(a) >, ≥   (b) =, >   (c) ≥, >   (d) >, >
(e) None of these

6. Which of the iollowing expressions is true, if the given expression is true?
E > F ≥ G = H ≤ I < J
(a) E > I   (b) J > G   (c) F ≥ J   (d) E ≥ H
(e) None of these

7. Which of the following symbols should be placed in the blank spaces respectively to make the expression Q > M and P ≥ M definitely true?
M_N_O_P_Q
(a) <, =, ≤, <   (b) ≥, >, =, >   (c) =, ≥, ≥, =   (d) ≤, = ≤, <
(e) None of these

8. What should come in place of question mark (?) in the given expression to make T < Q and L ≤ T definitely true? Q ? L = M ? R = T
(a) ≥, <   (b) ≥, >   (c) <, ≥   (d) <, ≤
(e) None of these

9. Which of the following expressions will be false, if the expression R < E = A ≥ M > N is definitely true?
(a) A > N   (b) E ≥ N   (c) R < A   (d) N < E
(e) None of these

10. Which of the following symbols should be placed in blank spaces respectively to make the expressions B ≥ J, L > C and J < A definitely true? H < A_B_C = J_L
(a) >, ≥, <   (b) <, ≥, >   (c) =, <, ≤   (d) <, ≤, <
(e) None of these

11. Which of the following expressions will be true if the expression Z ≥ Y > L = W ≥ N > F is definitely true?
(a) Z ≥ W   (b) L = N   (c) F < Z   (d) W = Y
(e) None of these

12. **If R < Q and V ≤ Q are definitely true then which of the following symbols should be placed in the blank spaces respectively?**
K > R _ C = Q ≥ A = M _ V
(a) ≤, ≥   (b) <, ≥   (c) ≤, =   (d) >, ≥
(e) None of these

13. **Which of the following expressions is true if the given expression is true?**
L ≥ N = J < P ≤ S > T
(a) S > J   (b) L > P   (c) T < J   (d) P ≥ N
(e) None of these

14. **Which of the following symbols should be placed in the blank spaces respectively in order to complete the given expression in such a manner that makes the expression H ≥ K and G > J definitely true?**
K _ J _ I _ H _ G
(a) <, =, ≤, <   (b) ≤, ≤, =>   (c) ≤, =, ≤, <   (d) =, <, <, =
(e) None of these

15. **Which of the following expressions is false if the given expression is true?**
T ≤ S < R = Q > P ≥ U
(a) Q > T   (b) R > U   (c) S = Q   (d) P < R
(e) None of these

16. **What will come in place of question mark (?) to make the expressions S < Z as well as R ≥ A definitely true?**
Z > A = N ? S ≤ P ≤ R
(a) >   (b) ≤   (c) <   (d) =
(e) None of these

Direction (17 to 22): Relationship between different elements is shown in the statements. Find if the conclusions also follow or not.

17. **Statements: S > K ≥ X < C = N ≤ Q > A**
Conclusions:
I. X ≥ Q   II. A > X
(a) only I follows   (b) only II follows
(c) either I or II follows   (d) neither I nor II follow
(e) both I and II follow

18. **Statements: H > E ≥ V = S > L ≤ A**
Conclusions:
I. E > L   II. S ≥ A
(a) only I follows   (b) only II follows
(c) either I or II follows   (d) neither I nor II follow
(e) both I and II follow

19. **Statements: Q ≥ B > K < F; F < Q = S**
Conclusions:
I. F ≤ B   II. Q < K
(a) only I follows   (b) only II follows
(c) either I or II follows   (d) neither I nor II follow

(e) both I and II follow

20. **Statements: M < W < U ≤ A = T ≥ V ≥ S**
Conclusions:
I. T > W   II. A ≥ S
(a) only I follows   (b) only II follows
(c) either I or II follows   (d) neither I nor II follow
(e) both I and II follow

21. **Statements: D < S < U ≤ C = X ≥ V ≥ E**
Conclusions:
I. D < X   II. X = U
(a) only I follows   (b) only II follows
(c) either I or II follows   (d) neither I nor II follow
(e) both I and II follow

22. **Statements: R > V ≥ A ≥ S; A ≥ S; A ≥ O ≥ U**
Conclusions:
I. V ≥ U   II. S = O
(a) only I follows   (b) only II follows
(c) either I or II follows   (d) neither I nor II follow
(e) both I and II follow

Direction (23 to 26): Relationship between different elements is shown in the statements. Find if the conclusions also follow or not.

23. **Statements: A < L ≤ B = X ≥ G; W ≥ X < S; Q ≥ L**
Conclusions:
I. W ≥ Q,   II. G < S
(a) only I follows   (b) only II follows
(c) either I or II follows   (d) neither I nor II follow
(e) both I and II follow

24. **Statements: G < Q ≤ A = N ≥ W; E ≥ N < O; D ≥ Q**
Conclusions:
I. Q ≤ W,   II. G < E
(a) only I follows   (b) only II follows
(c) either I or II follows   (d) neither I nor II follow
(e) both I and II follow

25. **Statements: E ≥ J ≥ S > C ≤ W ≤ D**
Conclusions:
I. E > W,   II. J ≤ D
(a) only I follows   (b) only II follows
(c) either I or II follows   (d) neither I nor II follow
(e) both I and II follow

26. **Statements: A > Z = Q ≥ M < S ≤ E; S > F; K < Z**
Conclusions:
I. E > F,   II. A < M
(a) only I follows   (b) only II follows
(c) either I or II follows   (d) neither I nor II follow
(e) both I and II follow

Directions (27 to 30): In these questions the symbols @, a, %, # and $ are used with different meanings as follow.

'A @ B' means 'A is neither smaller than nor equal to B'

'A ⌐ B' means 'A is not smaller than B'.

'A % B' means 'A is neither smaller than nor greater than B'

'A # B' means 'A is neither greater than nor equal to B'.

'A $ B' means 'A is not greater than B'.

In each question, four statements showing relationships have been given, which are followed by three conclusions I, II and III. Assuming that given statements are true find out which conclusion(s) is/are definitely true.

27. Statements

L # J; J @ Q; Q ⌐ R; R $ V

Conclusions :

I. L # Q   II. Q ⌐ V   III. J % V

(a) Only I is true   (b) Only II is true

(c) Only III is true   (d) I and II are true

(e) None of the above

28. Statements

R $ T; T @ V; V % W; W ⌐ Q

Conclusions

I. Q # T   II. R # Q   III. R ⌐ Q

(a) none is true   (b) Only I is true

(c) Either II or III is true

(d) I and either II or III are true

(e) None of the above

29. Statements

M @ J; J $ F; F % E; E # L

Conclusions

I. L @ J   II. J $ L   III. E % J

(a) I and II are true   (b) I and III are true

(c) II and III are true   (d) All are true

(e) None of these

30. Statements

H ⌐ G; G @ K; I # K; I % E

I. H @ I   II. E # G   III. H ⌐ E

(a) I and II are true   (b) Only I is true

(c) II and III are true   (d) All are true

(e) None of these

Directions (31 to 35) : In each of these questions the symbols @, #, $, % and ⌐ are used with different meanings as follow.

'P @ Q' means 'P is not smaller than Q'.

'P # Q' means 'P is not greater than Q'.

'P $ Q' means 'P is neither smaller than nor greater than Q'

'P % Q' means 'P is neither smaller than nor equal to Q'

'P ⌐ Q' means 'P is neither greater than nor equal to Q'

In each question, four statements showing relationships have been given, which are followed by four conclusions I, II, III and IV. Assuming that given statements are true find out which conclusion (s) is/are definitely true.

31. Statements

H % L; L @ Q; Q ⌐ R; R # N

Conclusions :

I. H @ Q   II. H % Q   III. N @ Q   IV. N % Q

(a) I and III are true   (b) II and III are true

(c) II and IV are true   (d) All are true

(e) None of these

32. Statements

V % W; W # Z; Z @ T; T $ H

Conclusions

I. Z % H   II. V @ Z   III. V ⌐ Z   IV. W $ T

(a) Either II or III is true   (b) Either II or IV is true

(c) II and III are true

(d) Either I or III and either I or IV are true

(e) None of the above

33. Statements

R @ J; J ⌐ F; F # M; M % V

Conclusions

I. J % V   II. R @ M   III. J # V   IV. R ⌐ M

(a) Either I or III is true   (b) Either II or IV is true

(c) II and III are true

(d) Either I or III and either I or IV are true

34. Statements

E $ F; F @ I; I % K; L ⌐ K

Conclusions

I. E @ I   II. L ⌐ F   III. F % K   IV. E % K

(a) None is true   (b) I and II are true

(c) II and III are true   (d) I, II and III are true

(e) All are true

35. Statements

L # T; T ⌐ D; D @ H; H $ K

Conclusions

I. K ⌐ D   II. K # D   III. L ⌐ D   IV. K $ L

(a) I and III are true   (b) II and III are true

(c) III and IV are true   (d) I and II are true

(e) None of these

Syllogism & Reverse Syllogism

LEVEL OF DIFFICULTY-1

Directions (1 to 5) : In each of the questions below are given four statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variane from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

1. **Statements :**   Some pencils are windows.

    All windows are roads.

    Some roads are cups.

    All cups are chains.

    Conclusions :   I. Some chains are pencils.

    II. Some cups are pencils.

    III. Some chains are windows.

    IV. Some roads are pencils.

   (a) none follows   (b) only II follows

   (c) only IV follows   (d) only III and IV follows

   (e) only III follows

2. **Statements :**   Some beds are mirrors

    Some mirrors are dolls.

    Some dolls are cheques.

    Some cheques are pins

    Conclusions :   I. Some pins are dolls.

    II. Some cheques are beds.

    III. Some cheques are mirrors

    IV. Some dolls are beds.

   (a) none follows   (b) only I follows

   (c) only II follows   (d) only III follows

   (e) only IV follows

3. **Statements :**   All chocolates are holders.

    No holder is lamp

    Some lamps are desks

    All desks are pens.

    Conclusions :   I. Some pens are holders.

    II. Some desks are lamps.

    III. No pen is holder

    IV. Some pens are Chocolates.

   (a) only I follows   (b) only II follows

   (c) only III follows

   (d) only either I or III follows

   (e) only either I or III and II follow

4. **Statements :**   All glasses are rooms.

    Some rooms are planes.

    All planes are ducks.

    Some ducks are lanterns.

    Conclusions :   I. Some lanterns are planes.

    II. Some ducks are rooms.

    III. Some rooms are glasses.

    IV. Some ducks are glasses.

   (a) Only I and II follow   (b) Only II and III follow

   (c) Only I, II and III follow   (d) All I, II, III and IV follow

   (e) None of these

5. **Statements :**   Some chairs are tents.

    Some tents are jugs.

    All jugs are glasses.

    All glasses are pots.

    Conclusions :   I. Some pots are tents.

    II. Some pots are chairs.

    III. Some glasses are chairs.

    IV. Some glasses are tents.

   (a) only I and II follow   (b) only II and III follow

   (c) only I and III follow   (d) only I and IV follow

   (e) None of these

6. **Statements :**   All cups are bottles.

    Some bottles are jugs.

    No jug is plate

    Some plates are tables.

    Conclusions : I. Some tables are bottles.

    II. Some plates are cups.

    III. No table is bottle.

    IV. Some jugs are cups.

   (a) only I follows   (b) only II follows

   (c) only III follows   (d) only IV follows

   (e) only either I or III follows

7. **Statements :**   Some chairs are handles.

    All handles are pots.

    All pots are mats.

    Some mats are buses.

    Conclusions :   I. Some buses are handles.

    II. Some mats are chairs.

    III. No bus is handle.

    IV. Some mats are handles.

(a) only I, II and IV follow

(b) only II, III and IV follow

(c) only either I or III and II follow

(d) only either I or III and IV follow

(e) only either I or III and II and IV follow

8. Statements :   All birds are horses.

                  All horses are tigers.

                  Some tigers are lions

                  Some lions are monkeys.

Conclusions :   I. Some tigers are horses.

                  II. Some monkeys are birds.

                  III. Some tigers are birds.

                  IV. Some monkeys are horses.

(a) only I and III follow   (b) only I, II and III follow

(c) only II, III and IV follow (d) All I, II, III and IV follow

(e) None of these

9. Statements :   Some benches are walls.

                  All walls are houses.

                  Some houses are jungles.

                  All jungles are roads.

Conclusions :   I. some roads are benches.

                  II. Some jungles are walls.

                  III. Some houses are benches.

                  IV. Some roads are houses.

(a) only I and II follow   (b) only I and III follow

(c) only III and IV follow   (d) only II, III and IV follow

(e) none of these

10. Statements :   Some sticks are lamps.

                  Some flowers are lamps

                  Some lamps are dresses.

                  All dresses are shirts.

Conclusions :   I. some shirts are sticks.

                  II. Some shirts are flowers.

                  III. Some flowers are sticks.

                  IV. Some dresses are sticks.

(a) none follows   (b) only I follows

(c) only II follows   (d) only III follows

(e) only IV follows

Directions (11 to 13) : In each question below are two/three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follow(s) from the statements disregarding commonly known facts.

   Give answer (a) if only conclusion I follow

   Give answer (b) if only conclusion II follows

   Give answer (c) if either conclusion I or conclusion II follows

   Give answer (d) if neither conclusion I nor conclusion II follows

   Give answer (e) if both conclusion I and conclusion II follow.

11. Statements :   Some pencils are eraswers.

                  All pencils are sharpeners.

                  All erasers are not sharpners.

Conclusions :   I. Some erasers can be pencil.

                  II. Some sharpeners are erasers.

12. Statements : All gases are solids.

                  All solids are liquids.

Conclusions :   I. All gases are liquids.

                  II. At least some liquids are solids.

13. Statements :   Some notes are coins.

                  No coin is a card.

Conclusions :   I. All cards can be notes.

                  II. Some notes are neither coins nor cards.

Directions (14 to 16) : In each of the following questions two/three statements are given followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read both the conclusions and then decide which of the given conclusions logically and definitely follows from the given statements disregarding commonly known facts.

14. Statements :   All beans are pulses.

                  All pulses are crops.

                  No crop is seed.

Conclusions :   I. All crops are pulses.

                  II. All beans are crops.

(a) only conclusion II follows

(b) neither conclusion I nor conclusion II follows

(c) Either conclusion I or conclusion II follows

(d) only conclusion I follows

(e) both conclusion I and conclusion II follows

15. Statements :   No fruit is vegetable.

                  All potatoes are vegetables.

                  Some fruits are apples.

Conclusions :   I. Some apples are potatoes.

                  II. Some potatoes being fruits is a possibility.

(a) both conclusions I and conclusions II follow

(b) only conclusion II follows

(c) either conclusion I or conclusion II follows

(d) only conclusion I follows

(e) Neither conclusion I nor conclusion II follows

16. Statements :   All books are journals.

                  All diaries are journals.

Conclusions :   I. All journals are books.

                  II. Some diaries being books is a possibility.

(a) either conclusion I or conclusion II follows

(b) only conclusion I follows

(c) both conclusion I and conclusion II follows

(d) neither conclusion I nor conclusion II follows

(e) only conclusion II follows

Directions (17 to 22) : In each question below are two/three statements, followed by two conclusions numbered I and II. You have to take the two/three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give answer (a) if only conclusion I follows

Give answer (b) if only conclusion II follows

Give answer (c) if either conclusion I or conclusion II follows

Give answer (d) if neither conclusion I nor conclusion II follows

Give answer (e) if both conclusion I and conclusion II follows

17-18: Statements : All buildings are houses.
No house is an apartment.
All apartments are flats.

17. Conclusions : **I.** No flat is a house.
II. No building is an apartment.

18. Conclusions : **I.** All buildings beings flats is a possibility.
II. All apartments being buildings is a possibility.

(19 to 20)

Statements : Some oceans are seas.
All oceans are rivers.
No river is a canal.

19. Conclusions : **I.** All rivers can never be oceans.
II. All canals being oceans is a possibility.

20. Conclusions : **I.** No ocean is a canal.
II. Atleast some seas are rivers.

Directions (21 to 30): In each questions below there are three statements followed by two conclusions numbered I and II. You have to take the four given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three statements disregarding commonly known facts. Given answer:

(a) If only conclusions I follows
(b) If only conclusions II follows.
(c) If either I or II follows.
(d) If neither I nor II follows.
(e) If both I and II follows.

21. Statements: Some books are buses.
Some buses are cars.
All cars are trains.

Conclusions I : Some cars are books.
II. No car is book.

22. Statements: All glasses are pens.
No Pen is chalks.
No chalk is Jug.

Conclusions I : No glass is chalk.
II. No glass is pen.

23. Statements: All forests are roads.
All roads are rivers.
All rivers are home.

Conclusions: I. Some home are roads.
II. Some rivers are forest.

24. Statements: All ropes are sticks.
No stick is pencil.
Some pencils are knife.

Conclusions: I. Some knife are ropes.
II. Some knife are sticks.

25. Statements: Some needles are clothes.
All clothes are shops.
All shops are market.

Conclusions: I. Some market are needle.
II. Some market are clothes.

26. Statements : Some pencils are Eraser.
All pencils are sharpeners.
All eraser are not Sharpener.

Conclusions: I. All eraser can be pencils.
II. Some sharpeners are eraser.

27. Statements: All silver is gold.
All copper is gold.
Some sliver is copper.

Conclusions I. Some gold is both silver and copper.
II. Some gold can be copper.

28. Statements: All A are Z.
All Z are X.
All Y are A.

Conclusions: I. All A are Y.
II. All Y are X.

29. Statements: 10% shoes are stockings.
5% stocking are papers.
99% papers are pens.

Conclusions: I. Some shoes are paper.
II. Some shoes are pens.

30. Statements: Some mangoes are red.
All red are tamairnd.
All tamarind are white.

Conclusions I. Some tamarind are red.
II. Some mangoes are white.

LEVEL OF DIFFICULTY-2

Directions (1 to 3): In these questions two/three statements followed by two conclusions numbered I and II have been given. You have to take the given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statements: All kites are birds.

No bird is an animal.

All animals are clouds.

1. Conclusions: I. Atleast some birds are clouds.

II. All clouds being birds is a possibility.

(a) Only conclusions II is true

(b) Neither conclusions I nor II is true

(c) Both conclusions I and II are true

(d) Either conclusions I or II is true

(e) Only conclusions I is true

2. Conclusions : I. No kite is an animals.

II. All kites being clouds is a possibility.

(a) Either conclusions I or II is true

(b) Only conclusions I is true

(c) Both conclusions I and II are true

(d) Neither conclusions I nor II is true

(e) Only conclusions II is true

Directions (4 to 5): In these questions two/three statements followed by two conclusions numbered I and II have been given. You have to take the given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statements : Some forces are energies.

All energies are powers.

All powers are strengths.

3. Conclusions: I. Atleast some forces are strength.

II. All energies are strengths.

(a) Only conclusions II is true

(b) Either conclusions I or II is true

(c) only conclusions I is true

(d) Both conclusions I and II are true

(e) Neither conclusion I or thus true

4. Conclusions : I. All forces being powers is a possibility.

II. All powers are energies.

(a) Only conclusions I is true

(b) Either conclusions I or II is true

(c) Only conclusions II is true

(d) Both conclusions I and II are true

(e) Neither conclusions I nor II is true

5. Statements: Some circles are rectangles.

All squares are rectangles.

Conclusions: I. Atleast some squares are circles

II. All rectangles are circles.

(a) Only conclusion I is true

(b) Either Conclusion I or II is true

(c) both conclusions I and II are true

(d) Only conclusions II is true

(e) Neither conclusions I nor II is true

Directions (6 to 11): In each question below are two/three statement followed by two conclusions numbered I and II. You have to take the two /three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give answer:

(a) If only conclusions I follows

(b) If only conclusions II follows.

(c) If either conclusions I or conclusions II follows

(d) If neither conclusions I nor conclusions II follows.

(e) If both conclusions I and conclusions II follows.

6. Statements: All rings are circles.

All squares are rings.

No ellipse is a circle.

Conclusions: I. Some rings being ellipses is a possibility.

II. Atleast some circles are squares.

7. Statements: No house is an apartment.

Some bungalows are apartments.

Conclusions: I. No house is a bungalow.

II. All bungalow are houses.

8. Statements : Some gases are liquids.

All liquids are water.

Conclusions: I. All gases being water is a possibility

II. All such gases which are not water can never be liquids.

9. Statements: All minutes are seconds.

All seconds are hours.

No second is a day.

Conclusions: I. No day is an hour.

II. Atleast some hours are minutes.

Directions (10 to 11): In these questions two/three statements followed by two conclusions numbered I and II have been given. You have to take the given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

10. **Statements:** Some teachers are professors.
    Some lecturers are teachers.
    Conclusions : I. All teachers as well as all professors being lecturers is a possibility.
    II. All those teachers who are lecturers are also professors.

11. **Conclusions:** I. No professor is a lecturer.
    II. All lecturers being professors is a possibility.

Directions (12 to 16) : In these questions two/three statements followed by two conclusions numbered two /three I and II have been given. You have to take the given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give answer:
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusions I or conclusion II follows.
(d) If neither conclusion I nor conclusion II follows.
(e) If both conclusion I and conclusion II follows

12. **Statements:** All gliders are parachutes.
    No parachute is an airplane.
    All airplanes are helicopters.
    Conclusions: I. No helicopter is a glider.
    II. Some parachutes being helicopters is a possibility.

13. **Conclusions:** I. No glider is an airplane.
    II. All gliders being helicopters is a possibility

14. **Statements :** Some mails are chats.
    All updates are chats.
    Conclusions: I. All mails being updates is possibility.
    II. No update is a mail.

Directions (15 to 16): In these questions two/three statements followed by two conclusions numbered I and II have been given. You have to take the given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

15. **Statements :** No stone is a metal.
    Some metals are papers.
    All papers are glass.
    Conclusions: I. No glass is a metal.
    II. Atleast some glass is metal.

16. **Conclusions:** I. All stones being glass is a possibility
    II. No stone is a paper.

Directions (17 to 21) : In each of the questions below are two/three statements followed by two conclusions numbered I

and II . You have to take the two/three given statements to be true even if they seem to be at variacne from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give answer:
(a) If only conclusion I follows.
(b) If only conclusions II follows.
(c) If either conclusions I or conclusion II follows.
(d) If neither conclusions I nor conclusions II follows.
(e) If both conclusions I and conclusions II follows.

17. **Statements:** All kites are birds.
    All airplanes are kites.
    No birds is a fish
    Conclusions : I. No fish is a kite.
    II. All airplanes are birds.

18. **Statements:** Some wires are fires.
    All fires are tyres.
    Conclusions: I. Atleast some tyres are wires.
    II. Some fires are definitely not wires.

19. **Statements:** No clip is a pin.
    All badges are pins.
    Conclusions: I. No badge is a clip.
    II. All pins are badges

20. **Statements:** No colour is a paint.
    No paint is a brush.
    Conclusions: I. No colour is a brush.
    II. Some brushes are colours.

21. **Statements:** All stars are plants.
    All plantes are galaxies.
    Conclusions: I. All galaxies are planets.
    II. All stars are galaxies.

Directions (22 to 26) : In each of the questions below are two/three statements followed by two conclusions numbered I and II . You have to take the two/three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give answer
(a) If only conclusions I follows.
(b) If only conclusions II follows.
(c) If either conclusions I or conclusions
(d) If neither conclusion I nor conclusions II follows
(e) If both conclusions I and conclusions II follows.

22. **Statements:** All lines are circles.
    Some circles are squares.
    Conclusions: I. No square is a line.
    II. Some squares are definitely not circle.

23. **Statements:** All kites are birds.
    No kite is a glider.
    Conclusions: I. Some gliders are definitely not birds.
    II. Atleast some birds are kites.

24. **Statements :** No fern is a plant.
    All roots are ferns.
    Conclusions: I. No plant is a root.
    II. All ferns are roots.

25. **Statements:** Some planets are stars.
    Some orbits are stars.
    Conclusions: I. No orbit is a planet.
    II. Atleast some stars are planets.

26. **Statements:** All solids are liquids.
    All liquids are gases.
    No gas is plasma
    Conclusions : I. All solids are gases.
    II. No liquid is plasma.

Directions (27 to 29): In each question given below four statements are followed by three conclusions numbered I, II and III. You have to take the four given statements to be true even if they seem to be at variance from the commonly known facts. Read the conclusions and decide which logically follows from the four given statements disregarding commonly known facts.

Statements: All boys are intelligent.
Very few girls are intelligent.
None girl is leader.
Some professor are leader as well as boys.

27. **Conclusions:** (i) Some professor can be girls.
    (ii) All professor being intelligent is a possibility.
    (iii) All intelligent can be boys.
    (a) only I follows   (b) Both I and III follow
    (c) Both I and II follow   (d) None follows
    (e) None of these

28. **Conclusions :** (i) All leaders are professors.
    (ii) Some girls being professors is a possibility.
    (a) none follows   (b) only II follows
    (c) Both II and III follow (d) only III follows
    (e) None of these

29. **Conclusions :** (i) At least some professors are girls.
    (ii) Some professors is intelligent.
    (iii) 5% professors are leader
    (a) only I follows   (b) only II follows
    (c) Both II and III follow (d) None of these

Directions (30 to 31) : In each question given below Five Statements are followed by Three conclusions numbered I, II and III. You have to take the five given statements to be true even if they seem to be at follows from the five given statements disregarding commonly known facts.

Statements : No apple is ball.
No ball is cat.
No cat is dog.
No dog is apple.
No apple is elephant.

30. **Conclusions :** (i) No cat is apple.
    (ii) No dog is ball.
    (iii) No elephant is cat.
    (a) None follows   (b) all follow
    (c) Both I and III follow   (d) Both I and II follow
    (e) None of these

31. **Conclusions :** (i) All elephant can be the ball.
    (ii) There is a possibility that some cat can be elephant
    (iii) All ball can be dog.
    (a) None follow   (b) all follow
    (c) Both II and III follow (d) Both I and II follow
    (e) None of these

Directions (32 to 34) : In each question given below Four statements are followed by Three conclusions numbered I, II and III. You have to take the four given statements to be true even if they seem to be at variance from the commonly known facts. Read the conclusions and decide which logically follows from the four given statements disregarding commonly known facts:

Statements: Some brooms are bottles.
Some pythons are wiper.
Any wiper can never be brooms.
Some bottles and pythons are lizard.

32. **Conclusions :** (i) Any python can be bottle.
    (ii) Any lizard can be wiper.
    (iii) All bottles being brooms is a possibility.
    (a) Both I and III follow   (b) None follows
    (c) Both I and II follow   (d) Both II and III follow
    (e) None of these

33. **Conclusions :** (i) Some wipers are python
    (ii) some pythons are not lizard.
    (iii) some brooms are not wiper.
    (a) only I follows   (b) only III follows
    (c) Both I and III follow   (d) only II follows
    (e) None of these

34. **Conclusions :** (i) All lizard are brooms being a possibility.
    (ii) Can you say that python is a part of bottle.
    (iii) 2% of wiper can never be brooms.
    (a) only I follows   (b) only II follows
    (c) only III follows   (d) none follow
    (e) None of these

LEVEL OF DIFFICULTY-3

Directions (1 to 5): Each questions below contain 2 conclusions followed by statements. Find from which of the statements given, both the conclusions given follow.

1. **Conclusions:**
   I. All phones are laptops is a possibility.
   II. No phone is tablet.
   STATEMENTS:
   (a) All phones are tabs. Some tabs are laptops. Some tabs are tablets.
   (b) Some phones are tabs. No tab is laptop. All laptops are tablets.
   (c) All phones are tabs. Some laptops are tabs. No tablet is tab.
   (d) No phone is tab. All laptops are tabs. No tablet is phone
   (e) None

2. **Conclusions:**
   I. All arm are eye is a possibility.
   II. Some ear are not arm.
   STATEMENTS:
   (a) No ear is nose. Some nose are arm. No nose is eye.
   (b) Some ear are nose. All nose are eye. No arm is nose.
   (c) All ear are nose. All nose are arm. No nose is eye.
   (d) Some nose are ear. All arm are nose. No ear is eye.
   (e) None

3. **Conclusions:**
   I. All euro are rupee is a possibility.
   II. All rupee are yen is a possibility.
   STATEMENTS:
   (a) All rupee are dollar. No dollar is yen. Some dollar are euro.
   (b) No rupee is dollar. Some dollar are yen. No yen is euro.
   (c) Some rupee are dollar. No yen is dollar. Some euro are yen.
   (d) No rupee is dollar. All dollar are yen. Some dollar are yen
   (e) None

4. **Conclusions:**
   I. All green are blue is a possibility.
   II. All red are green is a possibility.
   STATEMENTS:
   (a) Some red are blue. No white is blue. All green are white.
   (b) Some red are blue. Some blue are white. No blue is green.
   (c) All red are blue. Some red are white. No white is green.
   (d) Some red are blue. All white are blue. No white is green
   (e) None

5. **Conclusions:**
   I. All parrots are sparrows is a possibility.
   II. Some sparrows are pigeons.
   STATEMENTS:
   (a) All eagles are sparrows. Some pigeons are parrots. No parrot is sparrow.

   (b) All eagles are sparrows. Some eagles are pigeons. No pigeon is parrot.
   (c) Some eagles are sparrows. Some eagles are parrots. No parrot is pigeon.
   (d) Some eagles are sparrows. Some eagle is parrot. No pigeons are eagles.
   (e) None

Direction (6 to 7): In which of the following options does the given conclusions do not follow.

6. **Conclusions:**
   (i) Some print are mouse
   (ii) Some boat are not ship
   (a) Some print are boat. All boat are mouse. No mouse is ship
   (b) No ship is mouse. All mouse is boat. All boat are print.
   (c) All mouse are print. Some print are boat. No boat is ship.
   (d) Some boat are mouse. All mouse are ship. No ship is print.
   (e) Both conclusion follows in all the above statements.

7. **Conclusions:**
   (i) All rich being poor is a possibility.
   (ii) Some greedy are needy
   (a) Some rich are greedy. Some greedy are poor. All poor are needy.
   (b) No rich is Needy. Some needy are poor. All poor are greedy
   (c) No rich is greedy. Some greedy are poor. Some poor are needy
   (d) Some greedy are poor. All poor are needy. Some needy are rich
   (e) Both conclusion follows in all the above statements.

Direction (8 to 9): In which of the following options fourth statement follows from the first three statements?

8. (a) Some black are blue. No blue is red. All red are orange. Some black are not orange.
   (b) All red are blue. No blue is black. Some black is orange. Some black are not red.
   (c) No orange is red. Some red is blue. All blue is black. Some black are not red.
   (d) Some blue is red. All red is orange. No orange is black. Some black are not blue.
   (e) Does not follow in any option.

9. (a) All sky is ocean. No ocean is wind. All wind is fire. Some sky are not fire.
   (b) Some ocean are wind. All wind is fire. No fire is sky. Some sky are not ocean.
   (c) All wind is ocean. Some ocean is sky. No sky is fire. All wind being fire is a possibility.
   (d) All fire is wind. Some wind is ocean. No ocean is sky. Some fire are sky.
   (e) Does not follow in any option.

Direction (10 to 11) : In which option, 4th statement does not follow from the 1st three statements?

10. (a) All book are note. Some note is text. All text is paper. All book being paper is a possibility.
     (b) Some paper are text. All text is note. No note is book. Some paper are not book.
     (c) Some text are note. Some note is paper. All paper are book. Some book are text.
     (d) All note are paper. All paper is text. No text is book. Some book are not paper.
     (e) None of these

11. (a) All red are white . Some white are black. No black is blue. All red being blue is a possibility.
     (b) Some black are white. No white is red. All red is blue. Some black are not blue.
     (c) Some blue are black. All black is white. All white is red. Some blue are red.
     (d) Some white are black. All black are red. No red is blue. Some white are not blue.
     (e) None of these

Direction (12 to 15) : You have to determine using which two or three statements the given conclusion follows

12. **Conclusion:** Some Red are not Blue
     Statement:
     (i) All Red is Orange   (ii) Some Red is Orange
     (iii) No Orange is Blue.
     (a) (i) and (ii)   (b) (i) and (iii)   (c) (ii) and (iii)
     (d) Conclusion does not follow from any of the statements together
     (e) From Both (i) and (iii) AND (ii) and (iii)

13. **Conclusion:** All Red being Blue is a possibility.
     (i) All red is orange   (ii) No blue is orange.
     (iii) Some Orange is Blue
     (a) (ii) and (iii)   (b) (i) and (ii)   (c) (i) and (iii)
     (d) From Both (i) and (iii) AND (i) and (ii)
     (e) Conclusion does not follow from any of the statements together

14. **Conclusion:** No circle is square
     (i) All circle is rectangle.
     (ii) All Rectangle is diagonal
     (iii) No rectangle is square
     (iv) No diagonal is square
     (a) (i) and (iv)   (b) (i) and (iii)
     (c) Conclusion does not follow from any of the statements together
     (d) (i), (ii) and (iv)   (e) Both (b) and (d)

15. **Which of the following options if included in the statement will make the given conclusion follow?**
     Statements:
     Some paper is text.   All blue is mouse.
     No mouse is glass
     Conclusion:
     Some paper is not glass
     (a) Some text is blue   (b) All text is blue
     (c) No text is blue   (d) Some text are not blue
     (e) None of these

Directions (16 to 25) : Each questions below contain 2 conclusions followed by statements. Find from which of the statements given, both the conclusions given follow.

16. **Conclusions:**
     (i) Some bats are not rat   (ii) Some cat are rat
     STATEMENTS:
     (a) Some dog are rat. No rat is cat. All cat is bat.
     (b) All dog are rat. No rat is cat. Some cat is bat
     (c) No dog is rat. No rat is cat. All cat is bat
     (d) All dog are rat. All rat are cat. No cat is bat
     (e) None

17. **Conclusions:**
     (i) Some battery are not charger.
     (ii) Some mobile are not sim.
     STATEMENTS:
     (a) Some charger are mobile. No mobile is battery. All battery are sim.
     (b) All chargers are mobile . Some Mobile is battery. All battery are sim.
     (c) No charger is mobile. All mobile is battery. No battery is sim.
     (d) No charger is mobile. No mobile is battery. All battery is sim.
     (e) None

18. **Conclusions:**
     (i) Some watch are switch.
     (ii) Some remote are watch.
     STATEMENTS:
     (a) All watch are clock. Some clock are remote. No remote is switch.
     (b) Some watch are clock. All clock are remote. All remote is switch.
     (c) Some watch are clock. All clock are remote. No remote is switch.
     (d) All watch are clock. No clock is remote. All remote is switch
     (e) None

19. **Conclusions:**
     (i) Some bat are not dog   (ii) Some bat are cat.
     STATEMENTS:
     (a) All dog are cat. No cat is bat. Some bat are Rat.
     (b) Some dog are cat. Some cat are bat. All bat are rat.
     (c) No dog is cat. All cat is bat. Some bat are rat.
     (d) All dog is cat. Some cat is Bat. Some bat are rat.
     (e) None

20. **Conclusions:**
     (i) Some blue are not red.
     (ii) Some green is red.
     STATEMENTS:
     (a) All blue are black. All black is red. No red is green.
     (b) Some blue are black. All black is red. All red is green.
     (c) Some blue are black. No black is red. No red is green.
     (d) All blue is black. No black is red. All red is green
     (e) None

21. **Conclusions:**
    (i) All red is blue is a possibility.
    (ii) All green being yellow is a possibility.
    STATEMENTS:
    (a) All red is yellow. All yellow is blue. No blue is green.
    (b) Some red is yellow. No yellow is blue. Some blue is green.
    (c) Some red is yellow. Some yellow is blue. No blue is green.
    (d) All red is yellow. No yellow is blue. All blue is green.
    (e) None

22. **Conclusions:**
    (i) Some business are express
    (ii) Some express are times
    STATEMENTS:
    (a) All business are standard. All standard is times. Some times are express.
    (b) All business is standard. Some standard are times. All times are express.
    (c) No business is standard. All standard are times. Some times are express.
    (d) Some business is standard. All standard is times. No times is express
    (e) None

23. **Conclusions:**
    (i) Some heater are lamp.   (ii) Some fan are lamp.
    STATEMENTS:
    (a) All lamp are bulb. All bulb are fan. Some fan are heater.
    (b) All lamp are bulb. Some bulb are fan. All fan are heater.
    (c) Some lamp are bulb. All bulb are fan. All fan are heater
    (d) All lamp are bulb. All bulb are fan. Some fan are heater.
    (e) None

24. **Conclusions:**
    (i) Some tulip are not lily.
    (ii) Some flower are rose.
    STATEMENTS:
    (a) Some rose are not lily. All rose are tulip. All tulip are flower.
    (b) All tulip are rose. Some lily are not rose. Some tulip are flower.
    (c) All rose are lily. No lily is tulip. No tulip are flower.
    (d) Some rose are lily. No lily is tulip. Some tulip are flower
    (e) None

25. **Conclusions:**
    (i) All water being river is a possibility
    (ii) Some ocean are not lake.
    STATEMENTS:
    (a) Some lakes are water. All water us ocean. No ocean is river.
    (b) All lakes are water. All water is ocean. Some ocean is river.
    (c) All lakes are water. No water is ocean. Some ocean is river.
    (d) Some lakes are water. Some water is ocean. All ocean is river.

    (e) None

Directions (26 to 30): Each questions below contain 2 conclusions followed by statements. Find from which of the statements given, both the conclusions given follow.

26. **Conclusions:**
    All dollars are yen is a possibility.
    Some rupees are not yen
    STATEMENTS:
    (a) Some dollars are rupees. No rupee is yuan. All yen are yuan.
    (b) All dollars are rupees. No rupee is yen. Some yuan is rupee.
    (c) All dollars are rupees. Some rupee is yuan. All yuan are yen.
    (d) All dollars are rupees. Some rupee is yuan. No yuan are yen.
    (e) None

27. **Conclusions:**
    Some pencils are stencils.
    No pen is eraser.
    STATEMENTS:
    (a) No pen is pencil. All pencils are erasers. Some erasers are stencils.
    (b) No pen is pencil. All erasers are pencils. Some erasers are stencils.
    (c) All pens are pencils. Some pencils are erasers. No eraser is stencil.
    (d) Some pens are pencils. All pencils are erasers. No eraser is stencil.
    (e) None

28. **Conclusions:**
    All garlands are rings is a possibility.
    Some necklaces are anklets is a possibility.
    STATEMENTS:
    (a) Some rings are necklaces. Some necklaces are garlands. No necklace is anklet.
    (b) All rings are necklaces. No necklace is garland. Some garlands are anklet.
    (c) Some rings are necklaces. No necklace is garland. Some garlands are anklet.
    (d) All rings are necklaces. No necklace is garland. No garland is anklet.
    (e) None

29. **Conclusions:**
    No lemonade is milk.
    Some coffee is milk is a possibility.
    STATEMENTS:
    (a) All milk is juice. Some juice is lemonade. No coffee is juice.
    (b) All milk is juice. No juice is lemonade. Some lemonade is coffee.
    (c) Some milk is juice. No juice is lemonade. Some lemonade is coffee.
    (d) All milk is juice. Some juice is lemonade. All lemonade is coffee.
    (e) None

PRACTICE SET

Direction (1 to 5) : In each question, a set of six statements is given, followed by five answer choices. Each of the answer choices has a combination of three statements from the given set of six statements. You are required to identify the answer choice in which the third statements is logically follows the first two in the same order.

1. **Statements :**
   A. All red is green.
   B. All red is white
   C. All red is black.
   D. All black is white.
   E. All green is yellow.
   F. All green is white.
   (a) ABF   (b) AEF   (c) CDB   (d) CBE
   (e) None of these

2. **Statements :**
   A. All cows are goats.
   B. All goats are dogs.
   C. No goats are cows.
   D. No goats are dogs.
   E. All cows are dogs.
   F. All dogs are cows.
   (a) FAB   (b) ABE   (c) AFB   (d)ABF

3. **Statements :**
   A. Singers know English
   B. He does not know English.
   C. He is a Singer.
   D. He is not a Singer.
   E. He knows Hindi.
   F. He should know English
   (a) ABD   (b) AEF   (c) DEA   (d) ACF
   (e) None of these

4. **Statements :**
   A. P is taller than Q
   B. P and Q play golf.
   C. R is shorter than Q but taller than S.
   D. Golf and cricket are outdoor games.
   E. R is the second shortest.
   F. All outdoor games require energy.
   (a) ABC   (b) ACE   (c) ADF   (d) FBD
   (e) None of these

5. **Statements :**
   A. Some sharpeners are pencils.
   B. Rubbers are sticky.
   C. All sharpeners are rubbers.
   D. Sharpeners must be sticky.
   E. No pen is a rubber.
   F. Some sharpeners are rubbers.
   (a) ACE   (b) FCA   (c) CBD   (d) ABF
   (e) None of these

Directions (6 to 10) : In each question below are given three statements followed by four conclusions numbered I, II, III and IV . You have to take the given statements to be true even if they sem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given staements, disregarding commonly known facts.

6. **Statements:**
   (a) No mats are bedsheets.   (b) all mats are chairs.
   (c) all chairs are desks.
   Conclusions: **I.** All desks are mats.
   II. Some bedsheets are not desks.
   III. Some chair are not bedshets.
   IV. All mats are desks.
   (a) all follow   (b) only II, III and IV follow
   (c) only I, III and IV follow   (d) only III and IV follow
   (e) None of these

7. **Statements :**
   (a) all stoves are chimneys.
   (b) No almirahs are chimneys.
   (c) some tongs are stoves.
   Conclusions   I. Some chimneys are tongs.
   II. Some tongs are not almirahs.
   III. No stovesa re almirahs.
   IV. Some tongs are not stoves.
   (a) all follow   (b) only I, II and III follow
   (c) only II, III and IV follow   (d) only II and III follow
   (e) None of these

8. **Statements :**
   (a) some tumblers are jars.
   (b) all jars are ladles.
   (c) all ladles are spoons.
   Conclusions :   I. All jars are spoons.
   II. Some tumblers are spoons.
   III. Some ladles are tumblers.
   IV. Some spoons are not jars.
   (a) all follow   (b) only I, II and III follow
   (c) only II, III and IV follow   (d) only I and III follow
   (e) None of these

9. **Statements :**
   (a) No sievesa re boxes.   (b) all baskets are sieves.
   (c) all umbrellas are baskets.
   Conclusions :   I. Some sieves are not baskets.
   II. Some boxes are not sieves.
   III. All baskets are umbrellas.
   IV. Some baskets are not umbrellas.
   (a) None follows
   (b) only I, II and III follows
   (c) only I, II and IV follow
   (d) only either III or IV follow
   (e) None of these

10. **Statements :**
    (a) some thimbles are bobbins.
    (b) No bobbins are combs.
    (c) No bobbins are machines.
    Conclusions : No combs are machines.
    II. some combs are machines.
    III. Some thimble are not
    machines.
    IV. Some thimbles are not combs.
    (a) all follow (b) only I, III and IV follow
    (c) only II, III and IV follow (d) data insufficient
    (e) None of these

Directions (11 to 15): In each question are given four statements followed by five conclusions, one of which definitely does not logically follow (or is not a possibility of occurrence) from the given statements. That conclusions is your answer.

(**Note :** You have to take the four given statements to be true even it they seem to be at variance with commonly known facts and then decide which of the given conclusions logically does not follow from the given statements disregarding commonly known facts).

11. **Statements :** Some chocolates are toffees.
    All toffees are gems.
    All gems are candies.
    No candy is a stone.
    Conclusions :
    (a) No toffee is a stone.
    (b) some chocolates are not stones
    (c) No gem is a stone
    (d) All stones being chocolates is a possibility
    (e) All gems being stones is a possibility.

12. **All letters are words.**
    No vowel is a consonant.
    Some words are papers.
    Al papers are vowels.
    Conclusions :
    (a) some papers are consonants.
    (b) some vowels not being papers is a possibility.
    (c) All words being vowels is a possibility
    (d) No consonants is a vowel.
    (e) No paper is a consonant.

13. **Statements:** No table is a chair.
    Some chairs are boxes.
    No box is a cover.
    All covers are drawers.
    Conclusions :
    (a) some boxes are not tables.
    (b) some chairs are not covers.
    (c) all chairs are covers.
    (d) No cover is a box.
    (e) some drawers are covers

14. **Statements :** All cups are bottles.
    Some bottles are jugs.
    No jug is a bucket.
    All buckets are tubs.
    Conclusions :
    (a) some cups are buckets. (b) some cups are jugs.
    (c) some bottles are not buckets.
    (d) No cup is a jug (e) All tubs are jugs.

15. **Statements :** All numbers are letters.
    No letter is a book.
    Some books are papers.
    No paper is a copy.
    Conclusions :
    (a) No number is a book.
    (b) Some books are not copies.
    (c) Some papers are not numbers.
    (d) some books are not letters.
    (e) All papers being letters is a possibility.

Directions (16 to 20): In the following questions, only one Conclusion is given and five statements are given as (a), (b), (c), (d) and e. From this you have to take the statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given statement logically follows.

16. **Conclusions :**
    Some mouse is not monitor.
    Some keyboards are monitor.
    (a) Statements I: Some screen is monitor. No monitor is keyboard. All keyboards are mouse.
    (b) Statements II: All screens are monitor. No monitor is keyboard. Some keyboard is mouse
    (c) Statements III: No screen is monitor. No monitor is keyboard. All keyboards are mouse
    (d) Statements IV: All screens are monitor. All monitors are keyboard. No keyboard is mouse
    (e) Statements V: Some keyboards are mouse. All monitor is screen. No keyboard is a screen.

17. **Conclusions :**
    Some walls are not brick.
    Some cement is not water.
    (a) Statements I: Some brick are cement. No cement is wall. All walls are water.
    (b) Statements II: All bricks are cement. Some Cement is wall. All walls are water.
    (c) Statements III: No brick is cement. All cement is wall. No wall is water.
    (d) Statements IV: No brick is cement. No cement is wall. All walls are water.
    (e) Statements V: All walls are bricks. Some wall is cement. All waters are bricks.

18. **Conclusions:**
    Some silver are platinum.
    Some diamonds are silver.
    (a) Statements I: All silver are gold. Some gold are diamond. No diamond is platinum.

(b) Statements II: Some silvers are gold. All gold are diamond. All diamond is platinum.

(c) Statements III: All silvers are diamond. No gold is silver. Some diamond is platinum.

(d) Statements IV: All silvers are gold. No gold is diamond. All diamond is platinum

(e) Statements V: All platinum are silver. Some gold is silver. No gold is diamond.

19. Conclusions:

Some crows are not parrot.

Some crows are owl.

(a) Statements I: All parrot are owl. No owl is crow. Some crows are Dove.

(b) Statements II: Some parrots are owl. Some owls are crow. All crows are dove.

(c) Statements III: No parrot is owl. All owls are crow. Some crows are dove.

(d) Statements IV: All parrots are owl. Some owl is Dove. Some crows are dove.

(e) Statements V: All owls are Parrot. All Parrots are crow. All crows are dove.

20. Conclusions:

Some white are not brown.

Some maroon is brown.

(a) Statements I: All white are black. All black is brown. No brown is maroon.

(b) Statements II: Some white are black. All black is brown. All brown is maroon.

(c) Statements III: Some black are white. No black is brown. No brown is maroon.

(d) Statements IV: All white is black. No black is brown. All brown is maroon

(e) Statements V: No white is black. No black is brown. No brown is maroon

21. Conclusions:

All Donald being Micky is a possibility.

All Tom being Jerry is a possibility.

(a) Statements I: All Donald is Jerry. All Jerry is Micky. No Micky is Tom.

(b) Statements II: Some Donald is Jerry. No Jerry is Micky. Some Micky is Tom.

(c) Statements III: Some Donald is Jerry. Some Jerry is Micky. No Micky is Tom.

(d) Statements IV: All Donald is Jerry. No Jerry is Micky. All Micky is Tom.

(e) Statements V: No Jerry is Tom. Some Donald is Tom. No Micky is Donald.

22. Conclusions:

Some Table is plastic.

Some plastic are bench

(a) Statements I: All Table are Chair. All Chairs is bench. Some benches are plastic.

(b) Statements II: All Table is Chair. Some Chair is bench. All benches are plastic.

(c) Statements III: No Table is Chair. All Chairs are bench. Some benches are plastic.

(d) Statements IV: Some Table is Chair. All Chairs are bench. No bench is plastic

(e) Statements V: All Table is Chair. All Chairs are bench. All benches are plastic.

23. Conclusions :

Some dates are day.

Some years are day.

(a) Statements I: All day are month. All month are year. Some years are date.

(b) Statements II: Some days are month. All month are year. Some days are date.

(c) Statements III: All day are month. Some month is year. All year are date.

(d) Statements IV: All day are month. All month are date. Some years are date.

(e) Statements V: No year is day. Some day is date. Some date is month.

24. Conclusions:

Some teachers are not student.

Some lessons are classroom.

(a) Statements I: Some classroom is not student. All classrooms are teacher. All teachers are lesson.

(b) Statements II: All classrooms are teachers. Some student is not classroom. Some teacher is lesson.

(c) Statements III: All classrooms are student. No student is teacher. No teachers are lesson.

(d) Statements IV: some classrooms are student. No student is teacher. Some teachers are lesson

(e) Statements V: All students are classroom. All classrooms are lessons. All lessons are teachers.

25. Conclusions :

All windows being cot is a possibility.

Some doors are not pillow.

(a) Statements I: Some pillows are window. All windows are door. No door is cot.

(b) Statements II: All pillows are window. All windows are door. Some door is cot.

(c) Statements III: All pillows are window. No window is door. Some door is cot.

(d) Statements IV: Some pillows are window. Some window is door. All doors are cot.

(e) Statements V: No window is door. Some door is pillow. Some pillow is cot.

5

Advanced Blood Relations

LEVEL OF DIFFICULTY

Directions (1 to 3):

B is the mother of C who is the sister of G and H only. I is the son of H. D is the father of E. Among the children of A and B, only 1 is unmarried. G is the uncle of E who is the sister of F. C has only 2 children.

1. **How is G related to B?**

(a) son   (b) daughter   (c) son-in-law

(d) daughter-in-law   (e) Cannot be determined

2. **Who is the unmarried child of A and B?**

(a) C   (b) G   (c) H   (d) E

(e) Cannot be determined

3. **Who is the mother of F?**

(a) C   (b) H   (c) B

(d) Cannot be determined   (e) None of these

Directions (4 to 6):

P is the brother of Q. C is the daughter of P and also sister of J. A is mother of J. S is father of A. D who is son of T is brother of A. B has only one son and is married to E, mother of P.

4. **How is D related to J?**

(a) son   (b) father   (c) brother-in-law

(d) uncle   (e) Cannot be determined

5. **If G is married to Q, how is B related to G?**

(a) father   (b) father-in-law   (c) son-in-law

(d) uncle   (e) Cannot be determined

6. **If A relates to S in the same way as J relates to P, then how is J related to Q?**

(a) daughter   (b) nephew   (c) niece

(d) Cannot be determined   (e) None of these

Directions (7 to 9): Study the following information carefully to answer the questions that follow:

A is father of B and C is mother of A. E is sister of F whose daughter is G. S, the husband of C is the grandfather of G. P is father of E and brother of R. S has only two children, both of opposite sex.

7. **What is the relation between F and S?**

(a) F is daughter of S   (b) F is sister of S

(c) F is son of S   (d) F is daughter in law of S

(e) Either A option or D option

8. **What is the relation between E and B?**

(a) E is sister of B   (b) E is brother of B

(c) E is aunt of B

(d) E is maternal grandmother of B

(e) None of these

9. **What is the relation between B and G?**

(a) B is sister of G   (b) B is brother of G

(c) B is aunt of G   (d) There is no relation

(e) None of these

Directions (10-12):

A is mother of D who is father of G. B is grandfather of E and husband of A. D who has only two children is brother of C. A has two children both of same gender. J is aunt of H who is sister of G.

10. **What is the relation between J and D?**

(a) J is sister of D   (b) J is mother of D

(c) J is aunt of D   (d) Cannot be determined

(e) None of these

11. **What is the relation between C and E?**

(a) C is brother of E   (b) C is father of E

(c) C is uncle of E   (d) Cannot be determined

(e) None of these

12. **At least how many male members can be predicted by the given relations?**

(a) 2   (b) 3   (c) 4   (d) 5

(e) None of these

Directions (13-14) :

A has two sons. E is the daughter of G and B is the mother of C. F, the brother of E is the son of C who is the son of A. A is grandfather of J who is not a sibling of E. B has a child named D.

13. **What is the relationship between D and J?**

(a) D is father of J   (b) D is uncle of J

(c) J is son of D   (d) Cannot be determined

(e) None of these

14. **What is the ratio of males to females in the family?**

(a) 1 : 1   (b) 1 : 3   (c) 5 : 3   (d) 3 : 5

(e) Cannot be determined

Directions (15 to 18):

B is brother of P. A is mother of N. P is father-in-law of T. K is father of P. M is daughter of L. L is sister-in-law of D who is not married. D is aunt of O who is sister of N. K is father-in-law of L. M is granddaughter of C who is mother of D. N is married to T. C has only 1 daughter.

15. **How is B related to L?**

(a) brother   (b) brother-in-law

(c) nephew   (d) Cannot be determined

(e) husband

16. **If K has only 3 children, how is M related to B?**

(a) mother   (b) daughter

(c) granddaughter   (d) niece

(e) Cannot be determined

17. **If N is niece of D, how is T related to O?**

(a) brother   (b) brother-in-law

(c) nephew

(d) brother-in-law or sister-in-law

(e) husband

18. **How is C related to K?**

(a) mother   (b) daughter

(c) granddaughter   (d) niece

(e) wife

Directions (19 to 21: Study the information carefully and answer the questions given below.

X who is sister of O. L who is daughter of B and wife of Z. B and J are kids of Q and W who has only one son and one daughter.

J is married to P who is father of O and has only one daughter. S , who is father in law of A is uncle of J. Q ,who is father in law of P. A is wife of D.

19. **How is X related to B?**

(a) Aunt   (b) Uncle   (c) Nephew

(d) Niece   (e) Daughter

20. **How is W related to P?**

(a) Father   (b) Mother

(c) Mother- in- law   (d) Father-in-law

(e) None of these.

21. **What is the relation of S with respect to B?**

(a) Uncle   (b) Father   (c) Mother

(d) Can't be determined   (e) None of these.

Directions (22 to 24): There are ten members P, Q, R, S, T, U, V, W, X and Y in the family, there are three generations of the family. There is equal male and female. P is son-in-law of Y. Q sister X have only one brother P. Q and W are the married couple. Q is the mother-in-law of R, who is sister of T. V is the mother of Q. W is son-in-law of V. S is the only son of U, who is daughter-in-law of V.

22. **If Z is mother-in-law of P. then how is S related to Z?**

(a) Son   (b) Daughter

(c) Grandson   (d) Granddaughter

(e) Can't be determined

23. **If M is husband of R, then how is W related to M?**

(a) Father   (b) Father- in-law

(c) Uncle   (d) None of these

(e) Can't be determined

24. **If N is father of P, then how is U related to N?**

(a) Grandson   (b) Granddaughter

(c) Son   (d) Daughter-in-law

(e) None of these

Directions (25 to 27): In a family of seven persons L,M,N,O,P, Q ,R ,two are married couples.R is a housewife and her husband is a lawyer.N is the wife of M. L is the engineer and is the granddaughter of R, and O is the father in law of N,a doctor,and father of P, a professor.Q is L's brother and M's son.

25. **How is P related to M?**

(a) son   (b) brother

(c) daughter   (d) data inadequate

(e) none of these

26. **How is Q related to O?**

(a) grandfather   (b) uncle

(c) grandson   (d) data inadequate

(e) none of these

27. **Who is M's father?**

(a) O   (b) R   (c) N

(d) Data inadequate   (e) none of these

PRACTICE SET

Directions (1 to 2): M,N,O,P,Q.R.and S are the seven members of a family comprising two layout manager, two Magistrate, one editor, one economist and one analyst.It is also known that:

(a) There are exactly two married couples in the family.

(b) P, who is an analyst, is married to an Magistrate.

(c) No female member of the family is either an analyst or an economist.

(d) O, who is a layout manager,is married to M,an magistrate.

(e) Both the layout managers are females.

(f) S is married to P.

(g) It is male in the family who has ventured into the risk taking domain of editor.

(h) Neither N nor R is a layout manager.

1. How many male members are there in the family?
(a) 1   (b) 2   (c) 3   (d) 4
(e) none of these

2. Which of the following combinations of the member and his/her profession can be correct?
(a) N-Magistrate   (b) N-Economist
(c) R-Editor   (d) both option b and c
(e) none of these

Directions (3 to 7): In a family of six persons- A, B, C, D, E, and F there are 3 males and 3 females.There are 2 married couples and 2 persons are unmarried.Each one of them likes different animals.E who likes cat,is the mother-in-law of A,who is the wife of C. D is the father of F and he does not likes Tiger or Parrot.B likes Lion and is the sister of F who likes snake.C does not like Parrot.Fox is another animal.

3. Who among the following likes Tiger?
(a) A   (b) B   (c) C   (d) D
(e) Data inadequate

4. How is F related to E?
(a) Brother   (b) Son   (c) Father   (d) Daughter
(e) none of these

5. One of the married couple is?
(a) D-B   (b) D-E   (c) B-F   (d) E-F
(e) None of these

6. Which of the following animals is liked by A?
(a) tiger   (b) fox   (c) parrot   (d) lion
(e) none of these

7. How many sons does E have?
(a) 1   (b) 2   (c) 3   (d) 4
(e) none of these

Directions (8 to 10) : The director of a drama company has to assign different roles to two artists – Paramjeet and Kamaljeet to play in a drama depending on four different symbols–@ for father, $ for wife, # for brother and * for daughter.There were four combinations decided by the director showing the following results. Answer the questions on the basis of results 1, 2, 3, and 4.

(1) Paramjeet @ Kamaljeet stands for Paramjeet is father of kamaljeet.

(2) Paramjeet $ Kamaljeet implies Paramjeet is the wife of Kamaljeet.

(3) Paramjeet # Kamaljeet implies Paramjeet is the brother of Kamaljeet.

(4) Paramjeet * Kamaljeet implies Paramjeet is the daughter of Kamaljeet.

8. If Daljeet # Chiranjeet $ Baljeet ,which of the following statement is true?
(a) Daljeet is brother of Baljeet
(b) Daljeet is father-in-law of Baljeet
(c) Daljeet is father of Baljeet
(d) Daljeet is brother-in-law of Baljeet
(e) Can't be determined

9. If Manjeet * Chiranjeet @ Daljeet @ Baljeet,which of the following is not true?
(a) Manjeet is the mother of Baljeet
(b) Chiranjeet is the grandfather of baljeet
(c) Manjeet and Daljeet are siblings
(d) Manjeet is the aunt of Baljeet
(e) none of these

10. If Abhijeet # Chiranjeet * Baljeet,which of the following is not true?
(a) Baljeet is the parent of Abhijeet
(b) Abhijeet and Chiranjeet are siblings
(c) Abhijeet is the son of Baljeet
(d) Baljeet is the mother-in-law of chiranjeet
(e) none of these

Directions (11 to 13): There are ten members A, B, C, D, E, F, G, P, Q, and O in a family . Three generations and three married couples in family. B is maternal grandfather of G, who is sister of C. F is son-in-law of A, who is mother of three children. P is brother of E and son of B, who is father-in-law of O, who is not married to P. Q is sister-in-law of O and aunt of D. F has only daughter and D is not granddaughter of B. Q is sister of P.

11. How P related to C ?
(a) Maternal uncle   (b) Father

(c) Brother   (d) Maternal aunt

(e) None of these

12. **If R is brother of F, than how R related to Q?**

(a) Son   (b) Uncle

(c) Brother-in-law   (d) Sister-in-law

(e) None of these

13. **If M is sister of of B, than how M related to E?**

(a) Paternal aunt   (b) Mother

(c) Sister   (d) Can't determined

(e) None of these

Directions (14 to 17): Study the following information carefully to answer the questions that follow

B is brother of P. A is mother of N. P is father-in-law of T. K is father of P. M is daughter of L. L is sister-in-law of D who is not married. D is aunt of O who is sister of N. K is father-in-law of L. M is granddaughter of C who is mother of D. N is married to T. C has only 1 daughter.

14. **How is B related to L?**

(a) brother   (b) brother-in-law

(c) nephew   (d) Cannot be determined

(e) husband

15. **If K has only 3 children, how is M related to B?**

(a) mother   (b) daughter

(c) granddaughter   (d) niece

(e) Cannot be determined

16. **If N is niece of D, how is T related to O?**

(a) brother   (b) brother-in-law

(c) nephew

(d) brother-in-law or sister-in-law

(e) husband

17. **How is C related to K?**

(a) mother   (b) daughter

(c) granddaughter   (d) niece

(e) wife

Directions (18 to 20): There are ten members P, Q, R, S, T, U, V, W, X and Y in the family, there are three generations of the family. There is equal male and female. P is son-in-law of Y. Q sister X have only one brother P. Q and W are the married couple. Q is the mother-in-law of R, who is sister of T. V is the mother of Q. W is son-in-law of V. S is the only son of U, who is daughter-in-law of V.

18. **If Z is mother-in-law of P. then how is S related to Z?**

(a) Son   (b) Daughter

(c) Grandson   (d) Granddaughter

(e) Can't be determined

19. **If M is husband of R, then how is W related to M?**

(a) Father   (b) Father- in-law

(c) Uncle   (d) None of these

(e) Can't be determined

20. **If N is father of P, then how is U related to N?**

(a) Grandson   (b) Granddaughter

(c) Son   (d) Daughter-in-law

(e) None of these

Direction (21 to 24): Read the given information carefully and answer below Question.–

There are 7 family members P, Q, R, S, T, U and V standing in ground in which there are 2 married couples.

P is sister of Q who is maternal grandson of T. Maternal grandfather of Q is standing 3m to the right of Q who is facing north.

The father of S has 2 maternal grandchildren. V is facing north. V is standing 4m to the south of maternal grandson of U. S is 2m to the right of V.

P is 1m south of S and 1m west of U. R is sister–in–law of V and standing 9m to the north of her mother. V is father of P. U is a Female.

21. **Maternal grand daughter is standing in which direction w.r.t his husband?**

(a) south–east   (b) south

(c) north–west   (d) south–west

(e) None of these

22. **What is direction and distance and relationship of S with respect to P?**

(a) 1m north, Mother

(b) 1m south, Sister

(c) 1m north, Mather – in law

(d) 1m north, Daughter

(e) None of these.

23. **What is a minimum distance between V and His father – in – Law?**

(a) 3m   (b) 2m   (c) 4m   (d) 6m

(e) None of these

24. **A person starts from point T in east direction. Walks 6 m and turns right. Next walks 4 m and turns left. Next walks 3m and turns right. Now cycles for 8 km and stops. Find his distance from T.**

(a) 17 m   (b) $2\sqrt{31}$ m   (c) 15 m   (d) $7\sqrt{21}$ m

(e) 12 m

6

Sitting Arrangement

LEVEL OF DIFFICULTY

BASED ON SINGLE ROW

Direction (1 to 5): Study the following information carefully and answer the questions given below:

Eight persons Q, T, K, L, G, W, S and P are sitting in a row facing north but not necessarily in the same order. Three persons sit between L and W. S sits immediate left of L. Only one person sits between G and T. G does not sit at any of the extreme end. More than three persons sit between P and Q. Q sits left of P. Either P or Q sits at one of the end. Neither L nor W sits at any of the extreme end. G and T is not an immediate neighbour of S and L. G sits right of T.

1. **How many persons sit between P and K?**
   (a) None   (b) One   (c) Two   (d) Three
   (e) None of these

2. **Which of the following person sits second to the right of L?**
   (a) S   (b) Q   (c) K   (d) T
   (e) None of these

3. **Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?**
   (a) K   (b) T   (c) W   (d) G
   (e) S

4. **Which of the following persons sits fourth from the right end?**
   (a) T   (b) G   (c) K   (d) Q
   (e) None of these

5. **If S is related to Q, W is related to P, in the same way Q is related to which of the following?**
   (a) W   (b) T   (c) G
   (d) Cannot be determined   (e) None of these

Direction (6 to 10) : Study the following information carefully and answer the questions given below:

Eight persons P, Q, R, S, T, U, V and W are sitting in a row but not necessarily in the same order. Some of them are facing north and some of them are facing south. Note: Facing the same direction means, if one is facing north then the other also faces north and vice versa. Facing the opposite directions means, if one is facing North then the other faces south and Vice versa. Person name starts with consecutive alphabet does not sit next to each other.

R sits third to the right of W. T sits fifth to the left of R. Neither R nor T sits at any of the extreme end. Q sits second to the right of S. S faces north. S and T are not immediate neighbours. More than three persons sit between V and P. P and R are not immediate neighbours. Immediate neighbours of S as well as Q are faces same direction. Not more than two persons facing same direction sit next to each other. Person sitting at an extreme end faces same direction. V does not face the same direction as W.

6. **Which of the following person sits to the immediate left of U?**
   (a) W   (b) S   (c) Q   (d) T
   (e) None of these

7. **How many persons sit between R and P?**
   (a) One   (b) Two   (c) Three   (d) Four
   (e) Five

8. **If V is related to P, U is related to Q, in the same way S is related to which of the following?**
   (a) Q   (b) T   (c) P   (d) W
   (e) None of these

9. **Which of the following statement is true?**
   (a) U sits second to the left of V
   (b) Three persons sit between Q and R
   (c) More than two persons sit between V and S
   (d) P sits third to the right of W
   (e) Immediate neighbours of T facing opposite direction to each other.

10. **How many persons are facing north?**
    (a) One   (b) Two   (c) Three   (d) Four
    (e) None of these

Direction (11 to 15) : Study the following information carefully and answer the questions given below.

There are eight persons A, B, C, D, E, F, G and H sitting in a row. Four of them are facing north and four of them facing south but not necessary in the same order.

H sits to the immediate right of A. F faces north and sits fourth to the right of H. B is an immediate neighbor of A. F sits one of the extreme ends of the row. E sits second to the left of H. C sits second to the right of D. D is not an immediate neighbor of H. A faces the same direction as F faces. The immediate neighbours of E are facing opposite direction to E. B faces north direction.

11. **Who sits fourth to right of B?**
    (a) H   (b) E   (c) C   (d) D
    (e) None of these.

12. **Who sits immediate left of H?**
    (a) D   (b) B   (c) A   (d) C
    (e) None of these

13. **How many persons sit between B and E?**
    (a) Four   (b) One   (c) Three   (d) Two
    (e) None of these

14. **Who sits to the immediate left of the person who sits second to the right of A?**
    (a) G   (b) D   (c) H   (d) E
    (e) None of these

15. **Which of the following pairs sits extreme end of the row?**
    (a) F,E   (b) F,D   (c) F,C   (d) C,D
    (e) None of these

Direction (16 to 20) : Study following information carefully and answer the questions given below.

Twelve persons-M, N, O, P, S, T, U, V, W, X, Y and Z are sitting in straight line facing north.

N sits third to the right of M. Only two persons sit between X and T. M sits third from the left end of the line. Only three persons sit between O and U. Y sits second to the right of S. M is not an immediate neighbour of W and Z. T is not an immediate neighbour of N. U sits to the left of O. Z does not sit at the extreme end of the line. Only five persons sit between M and V. O is not an immediate neighbour of X. M sits second to the left of P.

16. **How many persons sit between W and P?**
    (a) Six   (b) Four   (c) Five   (d) Three
    (e) None of these

17. **What is the position of T with respect to Z?**
    (a) Immediate left   (b) Fourth to the left
    (c) Third to the right   (d) Six to the right
    (e) None of these

18. **Four of the following five are alike in certain way and thus form a group as per the given arrangement. Which of the following does not belong to that group?**
    (a) S-P   (b) V-O   (c) W-Y   (d) Z-U
    (e) M-N

19. **Who among the following sits at the extreme ends of the line?**
    (a) O, S   (b) W, T   (c) Y,X   (d) O, X
    (e) None of these

20. **How many persons sit between O and X?**
    (a) Five   (b) Three   (c) Six   (d) Seven
    (e) None of these

Directions (21 to 25) : Study the following information carefully and answer the given questions.

P, Q, R, S, T, V, W and X are sitting in a straight line facing north but necessarity in the same order.

(a) R sits third to the left of P. T sits fifth to the right of R but neither sits at any of the extreme ends.

(b) Q and S are immediate neighbours of each other but neither of them is an immediate neighbour of T.

(c) Only one person sits between Q and V, who is not an immediate neighbour of P.

(d) X does not sit at an extreme end.

21. **Who among the following pairs sit at the extreme ends of the line?**
    (a) X,R   (b) V,W   (c) V,X   (d) Q,W
    (e) None of these

22. **How many persons sit between X and R?**
    (a) Two   (b) Three   (c) Four   (d) Five
    (e) Cannot be determined

23. **If all the persons are made to sit in alphabetical order from left to right, the positions of how many of them will remain unchanged as compared to the original arrangement?**
    (a) None   (b) One   (c) Two   (d) Three
    (e) Four

24. **What is the position of V with respect to X?**
    (a) Fourth to the left   (b) Fifth to the left
    (c) Third to the right   (d) Fourth to the right
    (e) None of thes

25. **Four of the following five are alike in a certain way based on their seating arrangement and so form a group. Which is the one that does not belong to that group?**
    (a) VS   (b) QX   (c) PW   (d) TS
    (e) RP

BASED ON DOUBLE ROW

Directions (26 to 30) : Study the information given below and answer the given questions.

Twelve persons J, K, L, M, N, O, P, Q, R, S, T, U are sitting in two parallel rows. J, K, L, M, N, O are sitting in row-1 facing south direction and P, Q, R, S, T, U are sitting in row-2 facing north direction in such a way that each person sitting in row-1 faces the person sitting in row-2. Only one person sits between U and Q who is sitting at the extreme left end of the row. K, who is sitting at the extreme left end sits second to the left of J. L faces the one who is an immediate neighbour of U. P faces M. N, who is sitting at the extreme right end sits third to the right of the one who faces T. S, who is immediate neighbor of U does not face M. R faces the one who sits second to the left J.

26. **Who among the following faces K?**
    (a) P   (b) T   (c) R   (d) U
    (e) None of these

27. **Who sits third to the right of Q?**
    (a) T   (b) R   (c) P   (d) S
    (e) None of these

28. **Who among the following faces the one who sits to the immediate left of J?**
    (a) T   (b) Q   (c) U   (d) P
    (e) None of these

29. Four of the following are alike in a certain way so form a group which of the following does not belong to that group?

(a) Q   (b) U   (c) R   (d) N

(e) K

30. Who among the following faces the one who sits to the immediate left of the one who sits second right of M?

(a) R   (b) S   (c) T   (d) U

(e) None of these

Directions (31 to 35) : Study the following information to answer the given questions.

Twelve people are sitting in two parallel rows containing six people each, in such a way that there is an equal distance between adjacent persons. In row 1, P, Q, R, S, T and V are seated and all them are facing south. In row 2, A, B, C, D, E and F are seated and all of them are facing north. Therefore, in the given seating arraignment each member seated in a row faces another member of the other row.

A sits third to right of D. Neither A nor D sits are extreme ends T faces D. V does not face A and V does not sit at any of the extreme ends. V is not an immediate neighbour of T. B sits at one of the extreme ends. Only two people sit between B and E. E does not face V. Two persons sit between B and E. E does not face V. Two persons sit between R and Q. R is not an immediate neighbour of T. C does not face V. P is not an immediate neighbour of R.

31. Who amongst the following sit at extreme ends of the rows?

(a) B, E   (b) S, T   (c) P, R   (d) B, F

(e) None of these

32. Who amongst the following faces A?

(a) R   (b) T   (c) P   (d) Q

(e) S

33. How many persons are seated between T and S?

(a) One   (b) Two   (c) Three   (d) Four

(e) none

34. P is related to V in the same way as C is related to F. Which of the following is E related to, following the same pattern?

(a) B   (b) D   (c) C   (d) A

(e) none of these

35. Which of the following is true regarding F?

(a) F sits second to right of C.

(b) F is not an immediate neighbour of A.

(c) F sits third to left of D

(d) F sits at one of the extreme ends of the line.

(e) F faces V

Directions (36 to 40) : Study the following information to answer the given questions

Ten people are sitting in two parallel rows containing five people each, in such a way that there is an equal distance between adjacent persons. In row 1, P, Q, R, S, and T are seated and all of them are facing south. In row 2 A, B, C, D, and E are seated and all of them are facing north. Therefore, in the given seating arrangement, each member seated in a row faces another member of the other row.

D sits third to the left of A. P faces immediate neighbour of D. R sits second to the right of P. Only one person sits between Q and S. B and E are immediate neighbours. E does not face P and Q.

36. How many persons are seated between Q and T?

(a) None   (b) One   (c) Two   (d) Three

(e) cannot be determined

37. Four of the following five are alike in a certain way and thus form a group. Which is the one that does not belong to that group?

(a) R   (b) S   (c) C   (d) T

(e) A

38. Who amongst the following are sitting exactly in the middle of the rows?

(a) P, E   (b) S, D   (c) S, A   (d) A, R

(e) P, B

39. Which of the following is true regarding B?

(a) A and C are immediate neighbours of B.

(b) B sits at one of the extreme ends of the line.

(c) Q faces B

(d) T is an immediate neighbour of the person facing

(e) D sits on the immediate left of B.

40. Four of the following five are alike in a certain way and thus from a group. Which is the one that does not belong to that group?

(a) T-E   (b) Q-C   (c) S-B   (d) R-A

(e) P-D

Directions (41 to 45): Answer the questions on the basis of the information given below.

Ten people are sitting in two parallel rows containing six people each, in such a way that there is an equal distance between adjacent persons. In row-1 A, B, C, D, and E are seated and all of them are facing South. In row-2 P, Q, R, S, and T are seated and all of them are facing North. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row.

B is sitting at second position from right end of row. The person who is sitting second to left of Q is facing B. T is immediate neighbor of P. Either of T or P is sitting at one of the extreme ends of line. D is sitting opposite S. E is sitting second to the right of D. The person who is facing P is sitting second to right of A. R faces one who is sitting second to left of D.

41. Which of the following is true as per the above arrangement?

(a) Q is one place away from P

(b) E is sitting second to left of D

(c) Two persons are sitting between B and C

(d) B is facing S

(e) C is not sitting at an extreme end.

42. Who is facing C?

(a) Q   (b) R   (c) T   (d) P

(e) S

43. **How many persons are sitting between P and Q?**
    (a) None   (b) Three   (c) One   (d) Two
    (e) cannot be determined

44. **Four of the following five are alike in a certain way based on the given arrangement and so form a group. Which is the one that does not belong to that group?**
    (a) A – S   (b) D – Q   (c) E – P   (d) B – Q
    (e) C – Q

45. **Which of the following pairs is sitting at extreme end of lines?**
    (a) C, P   (b) C, T   (c) R, P   (d) E, A
    (e) None of these

Directions (46 to 50) : Answer the questions on the basis of the information given below.

Eight persons are sitting in two parallel lines. Each parallel lines four persons are sitting in equal distance . Line I, P, Q, R, S are sitting . (not necessary, they are sitting given above) and they are facing towards north. Line II, A, B, C, D, are sitting (not necessary they are sitting in a series given above) they are facing south. They are all sitting in such a way that line I and line II persons facing to each other.

B is second to the let of D. R is sitting to next who is facing D. Only one person is sitting between R and P. C is not facing to R. Two persons are sitting between R and Q.

46. **Which of the following is facing to P?**
    (a) A   (b) B   (c) C   (d) D
    (e) None of these

47. **Which of the following is facing to D?**
    (a) P   (b) Q   (c) R   (d) S
    (e) None of these

48. **Which of the following is sitting to next to the left who is facing B?**
    (a) P   (b) Q   (c) R   (d) S
    (e) Data inadequate

49. **Which of the following statement is true about S?**
    (a) S is the last person in a line
    (b) S is second to the right of Q.
    (c) S is not an immediate neighbor of P
    (d) S is sitting next to the right of person who is facing B
    (e) None of these

50. **Four of the following five are a like in a certain way and makes a group. Which is one that does not belong to that group.**
    (a) DS   (b) PB   (c) QB   (d) RA
    (e) PC

BASED ON CIRCULAR ARRANGEMENT

Directions (51 to 55) : Read the information given below and then answer the questions that follow:

Eight friends M,N, O, P , Q, R, S and T are sitting in a circle facing the centre . P is third to the right of M and second to the

left of S. T is third to the left of S. Q is not immediate neighbor of S. N is not immediate neigthbour of M. O is second to the right of N. Q is also not immediate neigthbour of T.

51. **Who is third to the right of N?**
    (a) Q   (b) T   (c) P   (d) R
    (e) None of these

52. **Who is second to the left of M?**
    (a) N   (b) R   (c) S
    (d) Data inadequate   (e) None of these

53. **Who is sitting between P and S?**
    (a) Only R   (b) R and N
    (c) only N   (d) Data inadequate
    (e) None of these

54. **How many persons are sitting between Q and S**
    (a) Only 2   (b) Only 3
    (c) Only 4   (d) Only 2 and or 3
    (e) None of these

55. **Who is sitting between T and M ?**
    (a) Only R   (b) Only N
    (c) Q and P   (d) Data inadequate
    (e) None of these

Directions (56 to 60): Read the following information carefully and answer the following questions.

A, B, C, D, E, F, G and H are sitting around a circular table. Only two of them are not facing the centre but sit opposite each other. G is the second to the right of A and third to the right of C. B is second to the left of C and fourth to the right of D. E is second to the right of H and is facing the centre. One of the persons who is facing outwards is an immediate neighbour of G and A both. D sits second to the right of C and is not an immediate neighbour of A.

56. **Who among the following is an immediate neighbours of E?**
    (a) C,B   (b) A,F   (c) B,H   (d) G,D
    (e) None of these

57. **Who among the following is second to the left of F?**
    (a) B   (b) E   (c) G   (d) D
    (e) None of these

58. **Who among the following sits second to the right of C?**
    (a) H   (b) F   (c) D   (d) A
    (e) None of these

59. **Who among the following are not facing the centre?**
    (a) CA   (b) CE   (c) GF   (d) EB
    (e) None of these

60. **Who among the following is third to the left of B?**
    (a) G   (b) H   (c) C   (d) F
    (e) None of these

Directions (61 to 65) : Answer the questions on the basis of the information given below.

Eight persons – A, B, C, D, P, Q, R and S are sitting around a circle not in same order. Three of them are facing towards the centre of circle while others are facing outside.

D is sitting third to right of A. There are 2 persons between D and Q. C and P are immediate neighbors and both are facing opposite direction. C and P both are not immediate neighbors of Q. S is sitting third to right of C. There is one person sitting between S and R. Q and D are facing opposite directions (like if Q is facing inside, then D is facing outside and vice versa). B is sitting immediate left of D. S sits second to right of R. D and S faces same direction. D and C faces opposite direction.

61. Who is sitting second to left of Q?
(a) A   (b) D   (c) S   (d) B
(e) P

62. Who is sitting opposite S?
(a) C   (b) P   (c) D   (d) A
(e) Q

63. Who is sitting third to right of P?
(a) Q   (b) D   (c) R   (d) B
(e) A

64. Which of the following persons faces towards the centre?
(a) B, D, S   (b) A, D, P   (c) A, C, Q   (d) C, Q, S
(e) None of these

65. Four of the following five are alike in a certain way based on the given arrangement and so form a group. Which is the one that does not belong to that group?
(a) Q – C   (b) B – Q   (c) P – S   (d) A – B
(e) D – R

... BASED ON SQUARE ARRANGEMENT

Directions (66 to 70) : Study the following information carefully and answer the given questions

Eight friends, Meenal, Rumia, Shikha, Ali, Peter, Harleen, Ketan and Bharat, are sitting around a square table in such a way that four of them sit at four corners of the square while four sit in the middle of each of the four sides. The ones who sit at the four corners face the centre while those who sit in the middle of the sides face outside.

Bharat sits second to the right of Shikha. Bharat does not sit at any of the corners. Meenal sits third to the right of Peter. Peter is not an immediate neighbour of Shikha. Rumia and Ketan are immediate neighbours of each other but Rumia does not sit at any of the corners of the table. harleen is an immediate neighbour of neither Peter nor Shikha.

66. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
(a) Peter   (b) Rumia   (c) Harleen   (d) Shikha
(e) Bharat

67. Who sits third to the left of Ali?
(a) Bharat   (b) Rumia   (c) Shikha   (d) Peter
(e) cannot be determined

68. What is the position of Peter with respect to Meenal?
(a) Immediate to the left   (b) Second to the left
(c) Third to the left   (d) Third to the right
(e) Second to the right

69. Who amongst the following sits second to the right of Ketan?
(a) Shikha   (b) Ali   (c) Bharat   (d) Harleen
(e) Meenal

70. Who amongst the following represent the immediate neighbours of Harleen?
(a) Meenal, Ketan   (b) Bharat, Rumia
(c) Bharat, Meenal   (d) Ali, Rumia
(e) Ali, Ketan

... BASED ON BOX ARRANGEMENT

Directions (71 to 73) : Answer the questions on the basis of the information given below.

8 boxes – A, B, C, D, E, F, G and H are placed one above the another but not necessarily in the same order.

Three boxes are placed between D and B. Two boxes are placed between E and B. Two boxes are placed between A and H. H is placed immediately below B. Two boxes are placed between C and G. Two boxes are placed between A and F.

71. How many boxes are placed between D and C?
(a) Two   (b) None   (c) Three   (d) Five
(e) One

72. If C is placed above G, which box is at bottom most position?
(a) B   (b) C   (c) H   (d) G
(e) Cannot be determined

73. Which box is placed just above box H?
(a) A   (b) D   (c) G   (d) B
(e) C

Directions (74 to 76) : Answer the questions on the basis of the information given below.

8 boxes – A, B, C, D, E, F, G and H are placed one above the another but not necessarily in the same order.

Two boxes are placed between F and E. F is placed above E. One box is placed between F and G. Three boxes are placed between A and H. A is placed immediately below F. Two boxes are placed between C and H. B is placed somewhere above D.

74. How many boxes are placed between F and H?
(a) Four   (b) None   (c) Three   (d) Five
(e) One

75. Which box is placed at top?
(a) B   (b) C   (c) H   (d) G
(e) Cannot be determined

76. Which box is placed just below box A?
(a) E   (b) D   (c) G   (d) B
(e) C

Directions (77 to 80): Answer the questions on the basis of the information given below.

8 boxes – A, B, C, D, E, F, G and H are placed one above the another but not necessarily in the same order.

There are four boxes placed between D and G. Two boxes are placed between B and G. Number of boxes between A and G is same as between H and B. A is placed above G. Two boxes are placed between A and H. C is placed just above G. There are at least 2 boxes between E and B.

77. **Which box is at top most position?**
(a) C   (b) A   (c) E   (d) H
(e) None of these

78. **How many boxes are between boxes E and A?**
(a) None   (b) Three   (c) One   (d) Five
(e) Four

79. **Which box is placed just above box B?**
(a) A   (b) C   (c) E   (d) H
(e) D

80. **How many boxes are below box F?**
(a) Three   (b) Four   (c) None   (d) Two
(e) Six

BASED ON FLOOR ARRANGEMENT

Directions (81 to 83) : Study the following information to answer the given questions:

P, Q, R, S, T, V and W are sitting in a straight line facing north. Each one of them lives on a different floor in the same building which is numbered from one to seven.
Q sits fourth to the left of the person living on the 6th floor. Either Q or the person living on the 6th floor sits at the extreme ends of the line.

Only one person sits between Q and W. W lives on the 3rd floor. The person living on 1st floor sits third to right of S. S is not an immediate neighbour of W. Only one person lives between T and the person who lives on the 2nd floor.

P and R are immediate neighbours of each other. P does not live on the 6th floor. One who lives on 5th floor sits third to right of the one who lives on the 7th floor.

81. **Who amongst the following lives on the 4th floor?**
(a) P   (b) Q   (c) R   (d) S
(e) V

82. **On which of the following floors does T live?**
(a) Ist   (b) IInd   (c) Vth   (d) IVth
(e) VIth

83. **How many floors are there between the floors on which V and P live?**
(a) 1   (b) 2   (c) 3   (d) 4
(e) none of these

Directions (84 to 88) : Answer the questions on the basis of the information given below.

There are 8 children – A, B, C, D, E, F, G and H who live on different floors of a 8-floor building numbered 1 to 8 not necessarily in the same order. They are in different class – 3, 5, 6 and 10 such that 2 children in same class. Children who are in same class live on even-odd floors. Example: If B is in class 10 with H, then if B lives on 6th floor then H lives on any odd floors – 1/3/5/7 and not 2/4/8.

B and G are in same class. One of the children in class 3 lives on 5th floor. The one who lives on 3rd floor is in even numbered class. The one who lives on 7th floor and C are in same class. A is in class 6 and lives on 4th floor. 2 children live between E and A. D is in 10th class. One child lives between E and G, both of which are in odd numbered classes. 2 children live between one of the children in class 10 and F. F lives below this child. Both children in class 10 live above C.

84. **Which of the following pair is in same class?**
(a) B, F   (b) D, F   (c) E, H   (d) A, D
(e) None of these

85. **Who lives on 8th floor?**
(a) E
(b) One of the children in class 6
(c) One of the children in class 10
(d) H
(e) One of the children in class 3

86. **How many children live between D and F?**
(a) 2   (b) 1   (c) None   (d) 4
(e) Cannot be determined

87. **Who lives just above G?**
(a) C   (b) A   (c) D   (d) H
(e) B

88. **Which of the following combination of floor number – child – class is correct?**
(a) 1 – C – 5   (b) 6 – B – 10   (c) 5 – D – 3   (d) 3 – F – 10
(e) 2 – C – 6

Directions (89 to 93) : Answer the questions on the basis of the information given below.

There are 8 people – A, B, C, D, E, F, G and H who stay on 5 floors (numbered 1 to 5) of a building. There are two flats on each of the five floors out of which two flats are vacant.

The flats are numbered 1 and 2 on each of the floors and are left to right on the floor respectively. Flat no. 1 of floor no. 2 is exactly above the flat no. 1 of floor no. 1 and so on. So when it is said that A lives above B means they share same flat number. Flats which are empty do not have same flat number.

H lives on flat number 1 of floor number 1. There is one floor between floors of H and C. C lives above H. B lives on floor which is immediately above C's. E lives immediately above G. A and E share same floor. There are 2 floors between A and D and they live in same flat number. D lives on one of the flats which is immediately above an empty flat. Two of A, B and F share same flat number.

89. **Who lives on flat number 2 of floor number 4?**
(a) Empty   (b) D   (c) B
(d) Cannot be determined   (e) E

90. **H shares floor with which of the following?**
(a) D   (b) F   (c) G
(d) No one   (e) Cannot be determined

91. **If flat number 2 of floor number 3 is empty, then who shares same floor with F?**
(a) D   (b) C   (c) H
(d) No one   (e) Cannot be determined

92. **Four of the following are similar in a certain way, and so form a group. Find the odd one out.**
(a) A – E   (b) D-B   (c) G-C   (d) C-D
(e) B-H

93. **How many floors are there between the floors of B and E?**
(a) None   (b) One   (c) Two   (d) Three
(e) Cannot be determined

LEVEL OF DIFFICULTY-2

... BASED ON ROW

Directions (1 to 5): Study the following information carefully and answer the question given below-

Eight persons i.e. A, B, C, D, M, N, O, and P are seating in a row and all are facing towards North direction (but not necessarily in the same order). They like different fruits i.e. Mango, Cherry, Pears, Banana, Apple, Peach, Guava, and Pomegranate (but not necessarily in the same order).

P sits second to the right of N, who likes Guava, who sits third to the right of M. A is not an immediate neighbour of N and P both. The one who likes cherry sits at one of the extreme ends of the row. C sits second to the right of B. Only one person who likes apple sits between B and M. B is not an immediate neighbour of both M and P, who doesn't like pomegranate. O sits fifth to the left of D. A likes mango and doesn't sit second to the left of N. The one who likes banana sits to the left of B, who doesn't like pomegranate and pears. O doesn't sit to the left of A.

1. **How many persons sit to the right of the one who likes Guava?**
   (a) Three   (b) Two   (c) One   (d) None
   (e) None of these

2. **Who among the following sits immediate left of B?**
   (a) The one who likes banana
   (b) M   (c) The one who likes apple
   (d) D   (e) None of these

3. **Who among the following sits exactly between C and the one who likes peach?**
   (a) P   (b) The one who likes guava
   (c) Both (b) and (d)   (d) N
   (e) None of these

4. **Who among the following sits at extreme end of the row?**
   (a) O   (b) M   (c) D   (d) None
   (e) B

5. **Who among the following sits immediate left of M?**
   (a) B   (b) The one who likes mango
   (c) The one who likes pears (d) N
   (e) None of these

Directions (6 to 10) : Study the following information carefully to answer the question given below:

Seven persons Mr. Singh, Mr. Mehta, Mr. Rao, Mr. Goyal, Mr. Sharma, Mr. Bacchan and Mr. Rathor are standing in a straight line facing north at equal distance but not necessarily in the same order. Each of them has different profession – Probationary officer (PO), Journalist, Clerk, Engineer, Businessman, Manager and Singer but not necessarily in the same order.

Mr. Rathor is standing at the fifth position to the left of Mr. Rao. Journalist is standing at the third position to the right of Mr. Rathor. Mr. Bacchan is standing at the fifth position to the right of Mr. Singh. Mr. Sharma is standing second to the left of Mr. Mehta. Engineer is standing the second position to the left of Mr. Goyal. Three persons are standing between Engineer and Singer. Clerk is standing to the immediate left of Engineer. Businessman is to the immediate right of manager.

6. **Who among the following is sitting second to the right of Manager?**
   (a) Mr. Rao   (b) Mr. Mehta (c) Businessman
   (d) Probationary officer   (e) None of these.

7. **Who among the following are the immediate neighbors of the one who is a Singer?**
   (a) Clerk and Businessman
   (b) Probationary officer and Businessman
   (c) Journalist and Probationary officer
   (d) Businessman and Journalist
   (e) None of these.

8. **Who among the following is sitting exactly in the middle of the row?**
   (a) Mr. Bacchan   (b) Businessman
   (c) Mr. Rao   (d) Journalist
   (e) Manager

9. **Who is sitting at extreme left end of the row?**
   (a) Mr. Singh (b) Mr. Mehta (c) Mr. Rao   (d) Mr. Goyal
   (e) None of these

10. **How many persons are there to the left of Journalist?**
    (a) One   (b) Two   (c) Three
    (d) Four   (e) None of these

Directions (11 to 15): Answer the questions on the basis of the information given below.

Eight persons – A, B, C, D, E, F, F, G and H are sitting in a straight line facing North (not necessarily in the same order). They have different ages – 12, 18, 27, 32, 34, 49, 55 and 63 (not necessarily in the same order).

B is sitting second to left of one having age 49 years. Two persons are sitting between B and D. One who is 32 years old is sitting second to right of D. One person is sitting between the persons having ages 32 and 18 years. A is sitting second to left of E. A is sitting somewhere to the left of D. The one who is 63 years old is sitting to immediate left of B. Difference between the ages of B and G is 7 years. Both are not sitting together. One who is 27 years old is sitting somewhere left of A. C is 6 years younger to D. The one who is 55 years old and H are immediate neighbors. Same number of persons are sitting between H and one having age 34 years and between F and one having age 55 years.

11. **What is the age difference between E and H?**
    (a) Other than those given in options
    (b) 31 yrs   (c) 22 yrs   (d) 23 yrs   (e) 19 yrs

12. **How many person/s are sitting between F and A?**
    (a) 1   (b) 4   (c) 2   (d) None
    (e) Cannot be determined

13. **Who is sitting to the immediate left of D?**
(a) E   (b) G   (c) B   (d) H
(e) A

14. **Who is 32 years old?**
(a) F   (b) H   (c) E   (d) A
(e) F

15. **How many person/s are sitting between G and B?**
(a) 2   (b) 3   (c) 1   (d) 5
(e) None of these

Directions (16 to 20) : Answer the questions on the basis of the information given below.

There are 8 members in a family – A, B, C, D, P, Q, R, and S. Each of them has a relationship with A – father, mother, sister, brother, wife, son, and daughter but not necessarily in the same order. They are sitting in a straight line facing North.

P is sitting second to right of A's son. Two people are sitting between P and B's brother. Two people are sitting between A's son and A's father. Q is immediate neighbor of A's father. Q is sitting at one of the extreme ends. D and A's brother are sitting together. A's brother is sitting second to left of A. A is not immediate neighbor of P. Two people are sitting between D and A's sister. S's father is sitting to the immediate right of A's daughter. A's wife is immediate neighbor of S. R is younger than C.

16. **How many people are sitting between P's mother and A?**
(a) 1   (b) 2   (c) 4   (d) None
(e) 5

17. **Who is A's brother's sister?**
(a) C   (b) Q   (c) S   (d) P
(e) B

18. **Who is A's wife?**
(a) D   (b) B   (c) Q   (d) P
(e) S

19. **Who is sitting second to right of A's sister?**
(a) A   (b) Q   (c) P   (d) C
(e) None of these

20. **How many people are sitting between D and A's daughter?**
(a) 2   (b) 3   (c) 5   (d) 6
(e) None

BASED ON DOUBLE ROW

Directions (21 to 25): Answer the questions on the basis of the information given below.

Ten friends are sitting on twelve seats in two parallel rows containing five people each, in such a way that there is an equal distance between adjacent persons. In Row 1: A, B, C, D and E are seated and all of them are facing south, and in Row 2: P, Q, R, S and T are sitting and all of them are facing north. One seat is vacant in each row. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row.

All of them like different colors – Red, Green, Black, Yellow, White, Blue, Brown, Purple, Pink and Grey, but not necessarily in the same order.

There are two seats between Q and the vacant seat. Q does not like White, Red and Purple. E is not an immediate neighbor of C. B likes Grey. Vacant seat of row 1 is not opposite to S and is also not at any of the extreme ends of Row-1.The one who likes Black sits opposite to the one, who sits third to the right of the seat, which is opposite to S. C is not an immediate neighbor of D. T, who likes neither White nor Blue, does not face vacant seat. D faces R. The vacant seats are not opposite to each other. Two seats are there between C and B, who sits third right of the seat, on which the person who likes Brown is sitting. S sits third to the right of seat on which R sits and likes Yellow. The one who likes Pink faces the one who likes Yellow. The persons who like Red and Purple are adjacent to each other. The vacant seat in row 1 is not adjacent to D.Q sits at one of the extreme ends. E neither likes Pink nor faces the seat which is adjacent to the one who likes Blue. The one who likes White is not to the immediate right of the one who likes Yellow. The person who likes Green doesn't face the person who likes Purple.

21. **How many persons are sitting between T and the one who likes yellow color?**
(a) None   (b) One   (c) Two   (d) Three
(e) None of these

22. **Which of the following faces the vacant seat of Row – 2?**
(a) The one who like white color
(b) A   (c) D
(d) The one who likes grey color
(e) Cannot be determined

23. **Who is sitting at the immediate left of person who likes purple color?**
(a) E   (b) D
(c) The one who likes black color
(d) The one who likes green color
(e) The one who likes grey color

24. **Who amongst the following sits at the extreme end of the row?**
(a) R, Q   (b) E, S   (c) T, C   (d) C, D
(e) None of these

25. **If Q is made to sit on vacant seat of his row, then how many persons are there between the persons who sit opposite to Q now and who sat opposite to Q previously?**
(a) Two   (b) Three   (c) Four   (d) None
(e) One

Direction (26 to 30) : Study the following information carefully to answer the given questions.

Ten persons from ten different cities viz. Delhi, Jaipur, Patna, Indore, Mangaluru, Chennai, Hyderabad, Bengaluru, Raipur and Sri Nagar are sitting in two parallel rows containing five people each, in such a way that there is an equal distance between adjacent persons. In row 1- A, B, C, D and E are seated and all of them are facing south. In row 2 – P, Q, R, S and T are seated and all of them are facing north. Therefore in the given seating arrangement, each member seated in a row faces another member of the other row.(All the information given above does not necessarily represent the order of seating in the final arrangement.)

The person from Indore sits to the immediate right of Q. P faces one of the immediate neighbors of the person from Jaipur. D faces one of the immediate neighbors of the person from Patna. S is not from Patna. D is not from Mangaluru. R sits second to the left of the persons from Sri Nagar. A sits third to the right of person from Chennai. Only One person sits between the person from Raipur and Q. C sits to the immediate left of the person who faces Q. Only two people sit between B and E. The person from Mangaluru sits second to the right of the one who faces S. S does not sit at an extreme end of the line. One of the immediate neighbors of the person from Mangaluru faces Raipur. P does not face A. The person from Delhi sits second to the right of the person from Bengaluru.

26. **Who amongst the following faces the person from Hyderabad?**
    (a) The person from Delhi   (b) D
    (c) The person from Chennai
    (d) The person from Raipur
    (e) B or E

27. **T is from which of the following Cities?**
    (a) Patna   (b) Indore   (c) Hyderabad
    (d) Raipur   (e) Mangaluru

28. **Which of the following is true regarding C?**
    (a) C sits an extreme end of the line
    (b) None of the given options is true
    (c) C is from Bengaluru
    (d) The person from Indore faces C
    (e) The person from Hyderabad is an immediate neighbor of C

29. **R is related to Indore in the same way as C is related to Jaipur based on the given arrangement, To who amongst the following is T related to the following same pattern?**
    (a) Delhi   (b) Sri Nagar (c) Patna   (d) Hyderabad
    (e) Raipur

30. **Who amongst the following sit at extreme end of the row?**
    (a) The person from Delhi and R
    (b) The persons from Bengaluru and A
    (c) A and the person from Patna
    (d) The persons from Chennai and Patna
    (e) A, E

··· BASED ON CIRCLE

Direction (31 to 35) : Study the following information carefully to answer the given questions.

Eight friends A, B, C, D, E, F, G and H are sitting around a circular table but not necessarily in the same order. Some of them are facing outward. They are working in four different companies Apple, IBM, Google and Intel. Two persons are working at each company.

G sits on the immediate right of B, who works at the Google. C sits third to the left of H, who works at the Apple and both are facing the same direction. C and B are not facing the same direction but C is an immediate neighbor of E, who is

fourth to the left of G. E and G both are facing opposite directions but both work at the same company. Those who work at the Google sit adjacent to each other but face opposite direction. Those who work at the IBM sit opposite each other. The immediate neighbours of E are not facing outward. A person who works at the Apple is an immediate neighbor of the persons who work at the Intel. D and F are immediate neighbours of H. D is not facing the centre and works at the Intel. The one who is on the immediate left of F is not facing the centre. F sits second to the right of C.

31. **Who among the following works at the Apple ?**
    (a) D and F   (b) H and F
    (c) G and C   (d) C and H
    (e) None of these

32. **Who among the following sits on the immediate right of the person who works at the IBM?**
    (a) B   (b) D   (c) A   (d) F
    (e) None of these

33. **How many persons are facing outward?**
    (a) Two   (b) Three
    (c) Four   (e) Can't be determined
    (e) None of these

34. **A works at which of the following?**
    (a) Either Google or Apple   (b) Either Intel or IBM
    (c) Google   (d) Intel
    (e) Can't be determined

35. **If D and F interchange their places then who among the following is on the immediate left of G?**
    (a) B   (b) D   (c) H   (d) F
    (e) None of these

··· BASED ON SQUARE

Directions (36 to 38) : Study the following information carefully and answer the given questions.

There are eight friends A, B, C, D, E, F, G and H are sitting around a square table in such a way that four of them sit at the four corners of the square table while other four sit in the middle of each of four sides. The one who sits at the four corners face the center and those who sit in the middle of the sides face outward. All of them are reading different magazine, vizMacLife, Linux, Esquire, Wizard, Forbes, Muse, Fortune and Money.

F sits third to left of the one who reads Linux magazine. The one who reads Linux magazine faces outward. Only two friends sit between F and A. The one who reads MacLife magazine sits on the immediate right of A. The one who reads Forbes magazine sits second to right of B, who is not immediate neighbor of A or F.B does not read Linux magazine. Only one friend sits between H and one who reads Forbes magazine. E sits on the immediate left of the one who reads Wizard magazine. B does not read Wizard magazine. D reads Esquire magazine but he is not immediate neighbor of H. The one who reads Money magazine is an immediate neighbor of D. The one who reads Muse magazine is an immediate neighbor of C. C is an immediate neighbor of both E and the one who reads Money magazine.

36. **Who among following reads Muse magazine?**
    (a) E   (b) A   (c) H   (d) G
    (e) F

37. **Who among following sits opposite to D?**
    (a) G   (b) F   (c) C   (d) B
    (e) A

38. **Who among following sits second to right of D?**
    (a) A   (b) E   (c) C   (d) B
    (e) G

Directions (39 to 43): Study the following information carefully and answer the questions given below:

Eight friends A, B, C, D, E, F, G and H are sitting around a square table in such a way that four of them sit at four corners of the square and face inside while four sit at the middle of each of the four sides and face outside. Each of them work on different dates of the same month, viz. 5, 11, 13, 15, 18, 21, 26 and 29 but not necessary in the same order.

B sits third to the right of the one who works on 29. B works on an even date. C works on 26 and sits opposite to A. C sits immediate right to the one who works on date 29. A doesn't sit at the corner. H sits opposite to F and the sum of the dates on which they are working is 26. Only two persons sit between F and G who works on date11. C is an immediate neighbour of E and the one who works on 21. The difference between the dates on which C and A works is 11.

39. **Who sits opposite to the one who works on date11?**
    (a) The one who works on date 18
    (b) C   (c) A   (d) D   (e) G

40. **Who sits second to the right of H?**
    (a) A   (b) E   (c) F   (d) D
    (e) B

41. **If A and H interchange their positions, then who sits to the immediate right of A?**
    (a) F   (b) E   (c) D   (d) C
    (e) G

42. **Four of the following five are alike in a certain way and so form a group. Find the one which does not belong to that group?**
    (a) G   (b) B   (c) A   (d) F
    (e) C

43. **How many persons sit between A and C?**
    (a) One   (b) Two   (c) Three   (d) Four
    (e) Five

Directions (44 to 48) : Read the following information carefully and answers the questions given below.

Eight friends J, K, L, M, N, O, P and Q like different drinks – Juice, Cold drink, Tea, Coffee, Shake, Milk, Water and Zalta. All of them are seated around a square table (two on each side) facing the centre. No one sits at corner.

L sits third to the right of K. K likes Tea. P is sitting second to the left of O. O is not an immediate neighbour of L and K. The one who likes Juice is an immediate neighbour of O. Three people sit between K and the person who likes Milk. K, L and also their immediate neighbours do not like Coffee. Only one person sits between the person who likes Coffee and M, when counted in clockwise from M. The persons who like Shake and Zalta are immediate neighbour of each other. L likes neither Zalta nor Shake. Only one person sits between J and the person who likes Cold drink when counted in anticlockwise direction from J. J does not like Coffee and Shake. N does not like Coffee. L and P do not sit on the same side of the table.

44. **Which of the following is true regarding P?**
    (a) P likes the Cold drink
    (b) Q and M are immediate neighbours of P
    (c) One person sits between P and the person who likes Zalta.
    (d) P sits second to the right of J
    (e) None of these

45. **Who amongst the following likes Shake?**
    (a) L   (b) P   (c) M   (d) N
    (e) Cannot be determined.

46. **How many persons sit between Q and the person who likes Zalta, when counted from the clockwise direction of the person who likes Zalta?**
    (a) None   (b) One   (c) Two   (d) Three
    (e) Four

47. **Which of the following is true?**
    (a) Only one person is sitting between the person who likes Zalta and Water.
    (b) Q likes Coffee.
    (c) The person who likes Shake is an immediate neighbour of K.
    (d) One person sits between K and the person who likes Coffee.
    (e) None is true

48. **Who amongst the following represent immediate neighbours of M?**
    (a) J, N
    (b) O and the person who likes Coffee
    (c) K and the person who likes Water
    (d) O, P
    (e) J, Q

Direction (49 to 53) : Study the following information carefully to answer the given questions.

Eight members P, Q, R, S, T, U, V and W of a family are sitting around a rectangular table with all of them facing outwards. Each one of them like different type of sports viz. HOCKEY, Cricket, Basket Ball, Foot Ball, BOXING, WRESTLING, Badminton and Tennis. Three married couples are there in the family.

W is the only sister-in-law of P whereas Q likes WRESTLING and daughter-in-law of RP who is the father of U and uncle of V, sits to the left of the person who likes HOCKEY. U is an immediate neighbor of her aunty W who does not sit next to S. R does not like Tennis or Badminton. The two youngest members sit next to each other. The one likes the Cricket sits between V and the one who likes BOXING. V is third to the left of S. The one who likes WRESTLING sits between the persons who like Badminton and Tennis Respectively. S's husband and

son sit next to her. Foot Ball is not liked by V's father. V does not like Basket Ball or Badminton. S is the mother of P and T, and sits second to the left of T.

49. **Which of the following statements is true regarding the family?**
   (a) P is the brother of W
   (b) R is the father-in-law of P
   (c) Q is the aunty of V
   (d) U and V are married couple
   (e) None of the Above

50. **Who among the following sits between Q and the one who likes Cricket?**
   (a) P   (b) T   (c) S   (d) V
   (e) W

51. **What is the position of the person who likes Foot Ball with respect to the one who likes WRESTLING**
   (a) Third to the right   (b) Second to the left
   (c) Immediate left   (d) Third to the left
   (e) Fourth to the left

52. **Who among the following likes Basket Ball?**
   (a) W   (b) U   (c) V   (d) X
   (e) T

53. **Which of the following options represent a pair?**
   (a) Y, X   (b) W, T   (c) W, R   (d) S, U
   (e) None of the above

Direction (54 to 58) : Study the following information carefully to answer the given questions.

Eight members P, Q, R, S, T, U, V and W of a family are sitting around a rectangular table with all of them facing outwards. Each one of them like different type of music instruments viz. XYLOPHONE, Balafon, Guitar, Piano, VIOLIN, TRUMPET, Accodion and Flute. Three married couples are there in the family.

W is the only sister-in-law of P whereas Q likes TRUMPET and daughter-in-law of RP who is the father of U and uncle of V, sits to the left of the person who likes XYLOPHONE. U is an immediate neighbor of her aunty W who does not sit next to S. R does not like Flute or Accodion. The two youngest members sit next to each other. The one who likes the Balafon sits between V and the one who likes VIOLIN. V is third to the left of S. The one who likes TRUMPET sits between the persons who like Accodion and Flute Respectively.

S's husband and son sit next to her. Piano is not liked by V's father. V does not like Guitar or Accodion. S is the mother of P and T, and sits second to the left of T.

54. **Which of the following statements is true regarding the family?**
   (a) P is the brother of W   (b) R is the father-in-law of P
   (c) Q is the aunty of V
   (d) U and V are married couple
   (e) None of the Above

55. **Who among the following sits between Q and the one who likes Balafon?**
   (a) P   (b) T   (c) S   (d) V
   (e) W

56. **What is the position of the person who likes Piano with respect to the one who likes TRUMPET ?**
   (a) Third to the right   (b) Second to the left
   (c) Immediate left   (d) Third to the left
   (e) Fourth to the left

57. **Who among the following likes Guitar?**
   (a) W   (b) U   (c) V   (d) X
   (e) T

58. **Which of the following options represent a pair?**
   (a) Y, X   (b) W, T   (c) W, R   (d) S, U
   (e) None of the above

Directions (16 to 20) : Study the following information carefully and answer the question given below-

A, B, C, D, E, F, G and H are eight kids sitting around a circular table. Four of them are facing away from the centre and four of them are facing towards the centre. Each of them like different candies-Hajmola, Poppins, Kismi, Satmola, AamPachan, Rochak, Pan pasand and Chatmola. All of them are holding a different colour balloon viz. White, Blue, Orange, Pink, Green, Purple, Yellow and Red but not necessarily in the same order. E faces towards the centre and holds White balloon. Both the immediate neighbors of E face away from the centre and are holding either Orange and Pink balloon. D faces away from the center and his favorite candy is Hajmola. Both the immediate neighbours of D do not face away from the centre. E sits third to the right of F, who has a Green balloon and faces away from the centre. C sits third to the left of F. The one who has an Orange balloon sits opposite to F. The one who has Blue balloon is not the immediate neighbour of F and faces away from the centre. A sits second to the left of C and he have neither Yellow nor Red balloon. The one who has a Yellow balloon sits between H and F. B faces away from the centre, likes Poppins and does not have a Blue balloon. E's favourite candy is Pan pasand. The person who likes Satmola opposite to D. The person having Purple balloon likes kismi. The person who likes Chatmola is not near to G nor E. C faces the person who likes Rochak.

16. Which one of the following related to Purple?
   (a) E   (b) F   (c) B   (d) D
   (e) A

17. Which one of the following related to Orange?
   (a) B   (b) H   (c) F   (d) D
   (e) None of these

18. How many persons are there between the one who related to Pink and the one who related to Orange when counted in anticlockwise direction from the person who related to Pink?
   (a) Four   (b) Two   (c) Three   (d) CND
   (e) None

19. Which one of the following related to Pink?
   (a) B   (b) H   (c) F   (d) D
   (e) None of these

20. Which of the following is B's position with respect to F?
   (a) Fourth to the left   (b) Third to the right
   (c) Second to the left   (d) Second to the right
   (e) None of these

Directions (21 to 25) : Answer the questions on the basis of the information given below.

There are 8 members in a family – A, B, C, D, P, Q, R, and S. Each of them has a relationship with A – father, mother, sister, brother, wife, son, and daughter but not necessarily in the same order. They are sitting in a circle facing centre.

One person is sitting between A and B. A's daughter is sitting third to right of B. One person is sitting between A and his father. A's daughter and C are sitting together. A's father is

sitting second to right of A's sister. B's sister and D's sister are immediate neighbors. S is sitting opposite B's mother. P who is a female is sitting third to right of Q. A's mother and C's brother are sitting together. D is A's son who is sitting opposite to the wife of A. No couple is sitting together.

21. Who is A's father?
   (a) C   (b) Q   (c) B   (d) S
   (e) None of these

22. Who is sitting opposite B's mother?
   (a) R   (b) Q   (c) P's daughter
   (d) R's daughter   (e) D's aunt

23. How many people are sitting between C and S's brother when counted clockwise from C?
   (a) 2   (b) 1   (c) None
   (d) 4   (e) Cannot be determined

24. Who is sitting 3rd to right of A?
   (a) C   (b) Q   (c) D's mother
   (d) S   (e) B's sister

25. P is A's _____
   (a) father   (b) sister   (c) brother   (d) wife
   (e) mother

Direction (26 to 30) : Read the following information and answer the questions below:

Eight family members Prabhu, Priya, Pradeep, Praveen, Preeti, Puja, Poorna and Pragati are sitting around a circular table facing the centre. Each has different professions – CA, CS, ICWA, FCA, Lawyer, IAS, Engineer and Pilot – but not necessary in the same order.

Priya sits second to the left of Pragati's husband, who is neither an FCA nor a Engineer. No female is an immediate neighbor of Priya. Praveen's daughter sits second to the right of Puja and on the immediate left of ICWA.Puja, who is sister of Poorna, is a Engineer. Puja is not an immediate neighbor of Pragati's husband.

Praveen's daughter is a CA.Only one person is sitting between Prabhu and Puja.Pragati's brother Praveen sits on the immediate left of his mother, who is an IAS. Prabhu is the father of Poorna. Only one person sits between Pragati's mother and Preeti.Preeti sits on the immediate right of the person who is a CS.Only one person sits between Pragati and Poorna. Poorna sits second to the right of the person who is a pilot. Poorna is mother of Pradeep and not an immediate neighbor of Preeti.

26. Who amongst the following is Praveen's daughter ?
   (a) Priya   (b) Pradeep   (c) Preeti   (d) Poorna
   (e) Pragati

27. Four of the following five are alike in a certain way based on the given information and so form a group. Which is the one that does not belong to that group ?
   (a) Puja, Preeti   (b) Pradeep, Puja
   (c) Preeti, Priya   (d) Pragati, Praveen
   (e) Poorna, Pragati

28. The person who is a Pilot is sitting between which of the following persons ?
   (a) CA and FCA   (b) IAS and CA
   (c) IAS and Lawyer   (d) FCA and Engineer
   (e) None of these

29. **Who among the following is an IAS?**
    (a) Can't be determined   (b) Prabhu
    (c) Pradeep   (d) Mother of Praveen
    (e) None of these
30. **What is the position of Prabhu with respect to his grandson ?**
    (a) Immediate left   (b) Third to the left
    (c) Immediate right   (d) Second to the right
    (e) Fourth to the left

Directions (31 to 35): Study the following information carefully and answer the given questions.

Eight friends Damodar, Dinesh, Daniel, Deepak, Devi, Deepti, Dilip and Divya are sitting around a square table in such a way that four of them sit at four corners while four sit in the middle of each of the four sides, but not necessarily in the same order. Each one of them like different colours viz. Green, Yellow, Black, Purple, Pink, White, Orange and Red. The one who sit in the middle of the sides face the centre while those who sit at the four corners face outside(i.e opposite to the centre).

Dilip sits third to the right of Devi. The one who faces the centre likes Green Colour. Devi sits on one of the corners of the table. Dinesh does not like yellow. The one who likes black colour is one of the immediate neighbours of Deepti. The one who likes green colour sits immediate left of the person one who likes black colour. Only one person sits between Deepak and Dilip. Dinesh is one of the immediate neighbours of Deepak. The one who faces the outside of the centre likes Pink Colour.

The one who likes Purple faces the Dilip. The persons who like Orange and White sit next to each other. Devi does not like Pink. Daniel sits second to the right of Dinesh. Only three persons sit between Dinesh and Damodar.

Divya sits to the immediate right of Damodar. The persons who like Yellow and Pink sit on the corners and opposite to each

other. The person who like Orange sit immediate right of the person who likes Red.

31. **Who among the following likes Black?**
    (a) Dinesh   (b) Daniel   (c) Deepak   (d) Devi
    (e) Damodar
32. **Four of the following five are alike in a certain way based on the given arrangement and so form a group. Which is the one that does not belong to that group?**
    (a) Daniel,Damodar   (b) Damodar, Devi
    (c) Daniel, Dinesh   (d) Dinesh, Deepak
    (e) None of the above
33. **What is the position of Damodar with respect to the one who likes pink colour?**
    (a) Third to the right   (b) Second to the right
    (c) Immediate left   (d) Third to the left
    (e) Fourth to the left
34. **Who among the following sits between Daniel and the one who likes Orange colour?**
    (a) Deepak
    (b) The one who likes purple
    (c) Devi
    (d) The one who likes red
    (e) Deepti
35. **Which of the following statements is true regarding Dilip?**
    (a) Dilip face outside
    (b) Dilip likes Purple
    (c) Dilip sits immediate left of the person who likes Orange
    (d) There are two people sit betwenDilip and Deepti.
    (e) None of the Above

LEVEL OF DIFFICULTY-1

Directions (1 to 5) : Study the following information carefully and answer the given questions :

One of the seven subjects, viz Maths, Zoology, Botany, Chemistry, Physics, English and Statistics, is taught on one day in a week starting from Monday and ending on Sunday. Chemistry is taught on Thursday. English is taught the day immediately next to the day when Zoology is taught. English is taught neither on Tuesday nor on Saturday. Only one lecture is held between Chemistry and Botany. Two lectures are scheduled between Maths and Zoology. Statistics taught neither on Monday nor on Sunday.

1. **On which of the following days is Physics taught?**
(a) Monday   (b) Tuesday   (c) Wednesday
(d) Thursday   (e) Friday

2. **How many subjects are taught between Botany and Zoology?**
(a) None   (b) one   (c) Two   (d) Three
(e) Four

3. **Which of the following subjects is taught on Saturday?**
(a) Botany   (b) Statistics   (c) Zoology   (d) Maths
(e) Physics

4. **On which of the following days is statistics taught?**
(a) Tuesday   (b) Wednesday   (c) Thursday
(d) Friday   (e) cannot be determined

5. **If Statistics is related to Zoology and Physics is related to Botany in a certain way, then which of the following would Chemistry be related to, following the same pattern?**
(a) Maths   (b) Statistics   (c) Physics   (d) English
(e) none of these

Directions (6 to 10) : Study the following information carefully and answer the given questions :

P, Q, R, S, T, V, W and Z are eight friends studying in three different engineering colleges- A,B and C in three disciplines – Mechacial, Electrical and Electroics with not less than two and not more than three in any college. Not more than three of them study in any of the three disciplines. W studies Electrical in college B with only T who studies Mechincal . P and Z do not study in college C and study in same discipline but not Electrical. R studies Mechnical in college C with V who studies Electrical. S studies Mechanical and does not study in the same college where R studies. Q does not study Electronics.

6. **Which of the following combinations of college-students-specialization is correct?**
(a) C-R-Electronics   (b) A-Z- Electrcial
(c) B-P –Electronics   (d) B-W- Electrical
(e) B-Z Electronics

7. **In which of the following colleges two students study in Electrical discipline?**
(a) A only   (b) B only   (c) C only
(d) Cannot be determined   (e) None of these

8. **In which discipline does Q study?**
(a) Electrical   (b) Mechanical
(c) Electrical or Mechanical (d) Data inadequate
(e) None of these

9. **In which of the colleges at least one student studies in Mechnical discipline?**
(a) A only   (b) B only   (c) C only
(d) Both A and B   (e) All, A,B and C

10. **S studies in which college?**
(a) A   (b) B   (c) A or B
(d) Data inadequate   (e) None of these

Directions (11 to 15) : Study the following information carefully and answer the given questions :

Seven friends P,F,R,T,Q,N and D are studying different specializations IT, Civil, HR, Marketing , Finance, Journalism and Pharmacy not necessarily in the same order. Each one of them have liking for a different colour red, blue, green, yellow, pink, orange and grey not necessarily in the same order. Three of them are girls.

P likes yellow colour but does not study IT or HR. The one who studies Civil. Like grey colour and is a girl. Q, who is sister of N, studies Marketing and likes pink colour. D's specialistion is in pharmacy and likes red colour. N, the wife of R studies HR and likes green. F likes grey and R likes orange, the one who likes blue studies Finance.

11. **Who is studying civil Engineering?**
(a) P   (b) T   (c) F
(d) Cannot be determined   (e) None of these

12. **Which of the following is the group of girls?**
(a)F,D,N   (b) F,Q,N   (c) Q,N,P
(d) Cannot be determined   (e) None of these

13. **Who subject is studied by R?**
(a) Civil   (b) Fiance   (c) Jouralism
(d) Cannot be determined   (e) None of these

14. **Who is studying Journalism?**
    (a) P   (b) Q   (c) R
    (d) Cannot be determined   (e) None of these
15. **Which of the following combinations of person – colour and subject is correct?**
    (a) Blue- T- Marketing   (b) Pink- N- HR
    (c) Orange- R- Civil   (d) Blue-T-Finance
    (e)None of these

Directions (16 to 20) : Study the following information carefully and answer the given questions :

Auditions for a show were held in seven different cities of India –Chennai, Bangalore, Cochin, Mumbai, Delhi, Bhopal and Kolkata, not necessarily in the same order, during the first seven months of the year 2011 (starting in January and ending in July). The auditions were held only in one city during a month. Auditions in only four cities were held between the Kolkata audition and the Cochin audition. The Kolkata audition was not held in June. Only one audition was held between the Kolkata audition and the Bangalore audition . The Chennai audition was held immediately after the Kolkata audition. The Delhi audition was held immediately 'before' the Bhopal audition. The Bhopal audition was not held in May.

16. **How many auditions were held between the Mumbai audition and the Chennai audition?**
    (a) One   (b) Two   (c)Three   (d) None
    (e) More than three
17. **Which of the following statements is true according to the given sequence?**
    (a) The Mumbai audition was held in July
    (b) Delhi audition was held in April
    (c) Cochin audition was held before May
    (d) Kolkata audition was held in January
    (e) None is true
18. **Four of the following five are alike in a certain way based on the given sequence and hence form a group?**
    (a) January- Kolkata   (b) March-Bangalore
    (c) June –Cochin   (d) May-Delhi
    (e) February-Chennai
19. **During March, the audition was held in which of the following cities?**
    (a) Bangalore (b) Kolkata (c) Mumbai (d) Chennai
    (e) None of these
20. **The audition in Mumbai was held in which of the following months?**
    (a) July   (b) May   (c) February (d) March
    (e) None of these

Directions (21 to 25) : Read the following passage carefully and answer the questions given below it.

A group of seven frinends, A, B, C, D, E, F and G work as Economist, Agriculture Officer, IT officer, Terminal Operator, Clerk, Forex Officer and Research Analyst, for Banks, L, M, N, P, Q, R and S, but not necessarily in the same order. C works for Bank N and is neither a Research Analyst nor a clerk. E is an IT

officer and works for Bank R.A. works as forex officer and does not work for Bank L or Q. The one who is an Agriculture Officer works for Bank M. The one who works for Bank L works as a Terminal Operator. F works for Bank Q G works for Bank P as a Resarch Analyst. D is not an Agriculture Officer.

21. **Who amongst the following works as an Agriculture Officer?**
    (a) C   (b) B   (c) F   (d) D
    (e) None of these
22. **What is the profession of C?**
    (a) Terminal Operator   (b) Agriculture Officer
    (c) Economist   (d) Cannot be determined
    (e) None of these
23. **For which bank does B work?**
    (a) M   (b) S   (c) L
    (d) Either M or S   (e) None of these
24. **What is the profession of the person who works for Bank S?**
    (a) Clerk   (b) Agriculture Officer
    (c) Terminal Operator   (d) Forex Officer
    (e) None of these
25. **Which of the following combinations of person profession and bank is correct?**
    (a) A-Forex Officer-M   (b) D-Clerk-L
    (c) F-Agriculture Officer-Q (d) B-Agriculture Officer-S
    (e) None of these

Directions (26 to 30) : Study the following information carefully and answer the given questions :

A,B,C,D,E,G and I are seven friends who study in three different standards namely 5th, 6th and 7th such that not less than two friends study in the same standard. Each friend also has a different favourite subject namely History, Civics, English, Marathi, Hindi, Maths and Economics but not necessarily in the same order. A likes Maths and studies in the 5th standard with only one other friend who likes Marathi. I studies with two other friends. Both the friends who study with I like languages (Here languages include only Hindi, Marathi and English). D studies in the 6th standard with only one person and does not like civics. E studies with only one friend. The one who likes History does not study in 5th or 6th standard. E does not like languages. C does not like English, Hindi or Civics.

26. **Which combination represents E's favourite subject and the standard in which he studies?.**
    (a) Civics and 7th   (b) Economics and 5th
    (c) Civics and 6th   (d) History and 7th
    (e) Economics and 7th
27. **Which of the following is I's favourite subject?**
    (a) History   (b) Civics   (c) Marathi
    (d) Either English or Marathi
    (e) Either English or Hindi
28. **Which amongst the following studies in the 7th standard?**
    (a) G   (b) C   (c) E   (d) D
    (e) Either D or B

29. **Which of the following is definitely correct?**
    (a) I and Hindi   (b) G and English
    (c) C and Marathi   (d) B and Hindi
    (e) E and Economics

30. **Which of the following subjects does G like?**
    (a) Either Maths or Marathi (b) Either Hindi or English
    (c) Either Hindi or Civics (d) Either Hindi or Marathi
    (e) Either Civics or Economics

Directions (31 to 36) : Study the following information carefully and answer the questions.

Each of the seven friends viz, P,Q,R,S,T,U and V joined seven different courses viz, MBA, MBBS, Law, Engineering, Arts, Science and Commerce (None of the given information is necessarily in the same order) on seven different days of the same week i.e., Monday to Sunday.

Only three people jointed after S. Only two people joined between S and the one who joined Law. Only three people joined between the one who joined Law and the one who joined Engineering . Only one person joined between V and the one who joined Arts. V joined before the person who joined Arts. V neither joined on Tuesday nor Wednesday. V did not join Egineering. Only three people joined between V and R. P joined on the day immediately before the one who joined Commerce. Neither S nor T joined Commerce . Q joined MBBS. P did not join Science.

31. **Who joined immediately before the day the person joined MBA?**
    (a) U   (b) P
    (c) The person who joined MBBS
    (d) V
    (e) The person who joined Engieering

32. **Who amongst the following joined on Tuesday?**
    (a) The one who joined Engineering
    (b) S   (c) R
    (d) The one who joined MBBS
    (e) U

33. **On which of the following days did the person join Commerce ?**
    (a) Friday   (b) Sunday   (c) Saturday
    (d) Wednesday   (e) Monday

34. **The one who joined Sceince joined , in which of the following days?**
    (a) Wednesday   (b) Saturday
    (c) Monday   (d) Thursday   (e) Friday

35. **How many people joined between the one who joined Arts and P?**
    (a) Two   (b) Three   (c) None   (d) One
    (e) Five

36. **Who joined immediately between the days on which V and the one who joined Science ?**
    (a) Q and the one who joined Engineering
    (b) T and the one who joined MBBS
    (c) R and S   (d) T and P
    (e) The one who joined Law and R

Directions (37 to 41) : Study the following information carefully and answer the questions given below :

A, B, C, D, E, F, G and H are eight employees of an organization working in three departments, viz personnel, Administration and Marketing with not more than three of them in any department. Each of them has a different choice of sports from football, cricket, volleyball, badminton, lawn tennis, basketball, hockey and table tennis, not necessarily in the same order.

D works in Administration and does not like either football or cricket. F works in Personnel with only A, who likes table tennis. E and H do not work in the same department as D. C likes hockey and does not work in Marketing. G does not work in Administration and does not like either cricket or badminton. One of those who work in Administration likes football. The one who likes volleyball works in Personnel. None of those who work in Administration likes either badminton or lawn tennis. H does not like cricket.

37. **Which of the following groups of employees work in Administration department?**
    (a) EGH   (b) AF   (c) BCD   (d) BGD
    (e) Data inadequate

38. **In which department does E work?**
    (a) Personnel   (b) Marketing
    (c) Administration   (d) Data inadequate
    (e) none of these

39. **Which of the following combinations of employee department-favourite sport is correct?**
    (a) E-Administration-Cricket
    (b) F-Personnel-Lawn Tennis
    (c) H-Marketing-Lawn Tennis
    (d) B-Administration-Table Tennis
    (e) none of these

40. **What is E's favourite sport?**
    (a) Cricket   (b) Badminton (c) basketball
    (d) Lawn Tennis   (e) none of these

41. **What is G's favourite sport?**
    (a) Cricket   (b) badminton (c) Basketball
    (d) Lawn Tennis   (e) none of these

Directions (42 to 45) : Answer the questions on the basis of the information given below.

Ten persons – A, B, C, D, E, F, G, H, K and L have seminars in January, April, May, July and September with two seminars in each month. The seminar is scheduled either on 22 or 28th of the month.

There are 2 seminars after E's seminar. There is one seminar between that of E and F. A's seminar is just before F's. H has seminar in a month having 30 days. G and B have seminar in same month. K's seminar is just before G's. There is one seminar between that of H and C. D's seminar is after L's seminar. L's seminar is on 22nd of any month.

42. **Who has seminar on 22 May?**
    (a) A   (b) G   (c) B   (d) K
    (e) D

43. How many people have seminars between G and F?
(a) One   (b) Four   (c) None   (d) Two
(e) Three

44. E has seminar on?
(a) 22 July   (b) 28 May
(c) 22 April   (d) 28 July
(e) None of these

45. How many seminars are scheduled before B's seminar?
(a) One   (b) Four   (c) None   (d) Two
(e) Three

Directions (46 to 50): Answer the questions on the basis of the information given below.

10 friends – A, B, C, D, E, P, Q, R, S, and T have birthdays in different months – January, March, April, June and September but not necessarily in the same order. There birthdays in on 2 different dates -22 and 28. So in each month there are 2 birthdays.

There are 2 birthdays after the birthdays of B. There are 2 birthdays between the birthdays of B and D. A and T have birthdays in March. There is one birthday between the birthdays of A and P. P's birthday is not in same month as D. There are same number of birthdays between T and C as between B and Q. C's birthday is not in April. Q's birthday is in a month having 30 days. No birthday is there between the birthdays of R and E. Also their birthdays are in different months. E's birthday is exactly between the birthday of A and S.

46. R's birthday is on ?
(a) 22 April   (b) 28 March
(c) 22 June   (d) 28 April
(e) None of these

47. Who has birthday in April?
(a) D   (b) C   (c) Q   (d) P
(e) B

48. How many birthdays are there in between the birthdays of E and Q?
(a) Four   (b) Two   (c) Three   (d) One
(e) Six

49. Which of the following combination of Month-Person-Date is correct as per the given arrangement?

(a) June – B – 22   (b) April – R – 22
(c) March – A – 22   (d) January – C- 22
(e) January – P – 28

50. Which of the following pair has birthday on 22nd of a month?
(a) P, B   (b) P, D   (c) C, E   (d) R, T
(e) S, E

Directions (51 to 55): Answer the questions on the basis of the information given below.

Eight persons – Adiya, Sahil, Ananya, Anshika, Ankur, Tiya, Rohit, Kavya have seminars in January, April, September and December with two seminars in each month. The seminar is scheduled either on 22 or 28th of the month.

Aditya's seminar is scheduled in a month having 30 days. Seminar of Kavya is somewhere after Tiya's seminar. Ankur's seminar is on 22nd April. There are two seminars scheduled between Sahil's and Ananya's seminars. One of seminars of Sahil and Ananya is somewhere before Ankur's seminar.

Rohit's seminar is immediately before Ananya's seminar. There is only one seminar after Kavya's seminar. Ananya and Tiya have seminars on same date but not in September.

51. Who has seminar on 28th September?
(a) Sahil   (b) Ananya   (c) Aditya   (d) Rohit
(e) Cannot be determined

52. How many persons have seminars before Ananya?
(a) Two   (b) Three   (c) Five   (d) None
(e) One

53. How many seminars are between seminars of Ankur and Rohit?
(a) Five   (b) Three   (c) Two   (d) One
(e) None

54. Who has seminar on 22nd December?
(a) Tiya   (b) Aditya
(c) Anshika   (d) Kavya
(e) Sahil

55. Find the odd one out.
(a) Rohit – 22   (b) Ananya – September
(c) Ankur – April   (d) Aditya – 28
(e) Anshika – 28

LEVEL OF DIFFICULTY-2

Directions (1 to 5): Answer the questions on the basis of the information given below.

Nine people Ankul, Priyal, Seema, Abhi, Rajat, Charu, Reema, Anjali and Gaurav stay in a building (floors numbered 1 to 9). They are studying different courses – BSc and BCom. Four of them are studying BCom and remaining persons are studying BSc. All of them belong to a different state viz – Haryana, Punjab, Assam, Nagaland, Telangana, Kerala, Jharkhand, Maharashtra and Bihar, but not necessarily in the same order.. Each of them also likes a different color – Orange, Grey, Pink, Purple, White, Blue, Green, Red and Yellow, again but not necessarily in the same order.

There is one floor between the floors on which Charu, who likes Grey color and Reema stay. Abhi, who likes Blue, stays on a floor immediately above Gaurav's floor, who likes Green color. Neither Ankul nor Seema belongs to Telangana. Seema does not belong to Haryana and likes Red color. The one who belongs to Jharkhand stays on the fourth floor but is not studying BSc. There are two floors between the floors on which the people who belong to Kerala and Nagaland stay. Rajat stays on the second floor and belongs to Assam. There are three floors between the floor on which Seema, who is studying BCom and Reema stay, who does not belong to Bihar and likes Pink color. The person who belongs to Telangana and Haryana are studying same course. Ankul is studying BSc and lives on an even numbered floor which is below the floor on which Anjali stays, who likes purple color. The one who belongs to Bihar stays on the third floor and is not studying BCom. The one who belongs to Haryana stays on the topmost floor and likes Orange color. The person belongs to Kerala and Nagaland are studying same course. Anjali belongs to Nagaland and is studying BSc and lives on an even numbered floor. The person belongs to Maharashtra does not live below the person who belongs to Punjab. Ankul does not like Yellow color.

1. Who stays on 8th floor?
(a) Charu
(b) The one studying BCom
(c) The one who likes Purple color
(d) The one who likes White color
(e) The one from Haryana

2. How many floors are there between the ones who like green color and who is from Maharashtra?
(a) None   (b) Two   (c) Four   (d) One
(e) None of these

3. Who is staying 4 floors above the one from Assam?
(a) The one from Kerala
(b) The one who likes purple color
(c) The one from Telangana
(d) Ankul
(e) The one who likes grey color

4. Four of the following five are alike in a certain way and forms a group. Find the one who does not belong to the group?
(a) Priyal
(b) The one from Telangana
(c) The who likes red color
(d) The one from Nagaland
(e) Gaurav

5. Which of the following is correct combination as per given arrangement?
(a) Anjali – Nagaland – Grey – BSc
(b) Ankul – Telangana – Grey – BCom
(c) Reema – Kerala – Pink – BSc
(d) Seema – Assam – Red – BCom
(e) Priyal – Haryana – Orange – BSc

Directions (6 to 10): Answer the questions on the basis of the information given below.

Eight people – Sheetal, Seema, Sakshi, Swati, Saina, Sanya, Sheena, Shrishti are born in different years – 1962, 1965, 1973, 1978, 1982, 1989, 1996, and 2005.

There ages are with respect to the current year, same month and same date.

There is 9 years difference between Shrishti and Sanya. Sheetal was born before 1973. Sheena is not 12 years old. Sakshi is 30 years old. Saina is 16 years older than Seema. Seema is younger than Shrishti.

6. Who was born in the year 1989?
(a) Swati   (b) Sakshi   (c) Sheetal   (d) Saina
(e) Seema

7. Sheetal was born in which year?
(a) 1962   (b) 1965   (c) 1973   (d) 1978
(e) 1989

8. What is the age difference between Seema and Sheena?
(a) 14   (b) 17   (c) 12   (d) 18
(e) 20

9. Find the odd one out from the following pairs?
(a) Saina – 1962   (b) Seema – 1978
(c) Swati – 1996   (d) Sakshi – 1989
(e) Sanya – 1982

10. What is the sum of ages of Sheetal and Sanya?
(a) 81   (b) 84   (c) 79   (d) 87
(e) 90

Direction (11 to 15): Study the following information carefully to answer the given questions.

Seven persons – A, B, C, D, E, F and G – went to tour in the months of February, March, April May, July, October and December but not necessarily in the same order. Each one of them likes different brand of cycle viz., Firefox, Hercules, Atlas, BSA, Hero, Montra and Kross but not necessarily in the same order. Each person also like seven different brand of bikes

namely viz – Honda, Yamaha, Suzuki, Harley Davidson, TVS, Royal Enfield and Vespa.

There are two persons went to tour between the one who likes Honda and the one who likes Vespa. E does not like Atlas. The person who likes Montra went to tour in the month having less than 31 days. The person who likes Honda went to tour on one of the months after March which has less than 31 days. The one who likes Hero went to tour in the month having less than 31 days. There is only one person between A and the person who likes Hero. The person who likes Vespa went to tour immediately before the one who likes Suzuki. G went to tour in that month which has less than 31 days. F went to tour immediately after G. Only one person went to tour between A and the who likes BSA F does not like Harley Davidson. A does not like Montra. The one who likes Firefox went to tour immediately before the one who likes Kross. The person who likes Yamaha went to tour immediately before the one who likes Royal Enfield and immediately after the one who likes Honda. The one who likes Atlas went to tour immediately before A. C went to tour immediately after A. Only two persons went to tour between C and B.

11. Which of the following brand of cycles is liked by C?
(a) Firefox (b) BSA (c) Montra (d) Hercules
(e) Kross

12. Which of the following combinations of Month-Person-Cycle-Bike is correct?
(a) March – G – Firefox – Harley Davidson
(b) July – A – Firefox – Royal Enfield
(c) October – E – Montra – Yamaha
(d) May – C – Atlas – TVS
(e) April – F – Hero – Vespa

13. Which of the following statements is true with respect to the given arrangement?
(a) C went to tour in October
(b) A likes Kross
(c) D went to tour immediately before E.
(d) E went to tour in July
(e) None of the given statements is true

14. Who among the following went to tour in May?
(a) F (b) A (c) C (d) D
(e) B

15. Who among the following likes Royal Enfield?
(a) E (b) C (c) A (d) G
(e) B

Direction (16 to 20) : Study the following information carefully to answer the given questions

Seven People namely M, N, O, P, Q, R and S have an anniversary but not necessarily in the same order, in seven different months of the same year namely February, March, April, June, September, October and November. Each of them also likes a different book namely One Indian Girl, The God of Small Things, Everyone Has a Story, The Ministry of utmost Happiness, Half Girl Friend, Bahubali: The Battle of Bold and The Small Town Sea but not necessarily in the same order.

R has an anniversary in the month which has more than 30 days. Only one person has an anniversary between R and the one who likes One Indian Girl. Both S and O have an anniversary in one of the months after the one who likes One Indian Girl. S has an anniversary immediately before O. The one who likes Everyone Has a Story has an anniversary in the month which has less than 30 days. Only three people have an anniversary between the one who likes Everyone Has a Story and the one who likes The Small Town Se(a) Only two people have an anniversary between S and the one who likes The Ministry of utmost Happiness. P has an anniversary immediately after the one who likes The Ministry of utmost Happiness. Only two people have an anniversary between P and Q. M has an anniversary immediately before the one who likes The God of Small Things. O does not like Bahubali: The Battle of Bold.

16. Which of the following represents the month in which S has an anniversary?
(a) October (b) March (c) April
(d) September (e) Can not be determined

17. Which of the following does O like?
(a) One Indian Girl
(b) The God of Small Things
(c) The Ministry of utmost Happiness
(d) Half Girl Friend
(e) The Small Town Sea

18. As per the given arrangement, Everyone Has a Story is related to April and The Ministry of utmost Happiness is related to September following a certain pattern, which of the following is The Small Town Sea related to following the same pattern?
(a) February (b) June (c) October
(d) November (e) March

19. Which of the following represents the people who have an anniversary in April and November respectively?
(a) N,M (b) Q,M (c) Q,O (d) N,O
(e) N,S

20. How many people have an anniversary between the months in which Q and M have an anniversary?
(a) None (b) One (c) Three (d) Two
(e) More than three

Direction (21 to 25) : Study the following information carefully to answer the given questions.

Eight people P, Q, R, S, T, U, V and W were born in three different months(of the same year) but not necessarily in the same order, namely March June and December such that not less than two people and not more than three people were born in a month. Each of them also likes a different fruit namely Guava, Peach, Banana, Cherry, Mango, Orange, Kiwi and apple but not necessarily in the same order.

Only Q and W were born in March. R likes Apple and was born in the same month as T. R was not born in December. The one who likes Mango was born in the month which has 30 days only.

- U was not born in the same month as T. S likes Cherry and born in the same month as U. V does not like Mango.

- The one who likes Kiwi and the one who likes Banana were born in the same month, The one who likes Kiwi was not born in the same month as W.

- U does not like Kiwi. The one who likes Guava was born in the same month as P. Q does not like Peach. T does not like Mango.

21. As per the given arrangement which of the following combination represents only the people who were born in December?.

(a) T, V   (b) U, P, T   (c) V, U   (d) P, T

(e) U, V, S

22. As per the given arrangement which of the following person represent the one who was born in the same month as the one who likes Orange?

(a) U   (b) P   (c) R   (d) T

(e) W

23. Which of the following fruits does T like as per the given arrangement?

(a) Orange   (b) Peach   (c) Guava   (d) Banana

(e) Other than those given as options

24. Which of the following combinations is correct as per the given arrangement?

(a) December – Peach   (b) June – Orange

(c) June – Banana   (d) March – Guava

(e) December – Banana

25. Who amongst the following likes Peach as per the given arrangement?

(a) P   (b) V   (c) U   (d) W

(e) T

Direction (26 to 30) : Study the following information carefully to answer the given questions.

Eight friends namely P, Q, R, S, T, U, V and W live on eight different floors of a building but not necessarily in the same order. The ground floor is numbered 1 and the one above that is numbered 2 and so on till the topmost floor is numbered 8. Each one of them owns a different car, namely Santro, Brio, Amaze, Civic, Etios, Celerio, Micra and Fabia (but not necessarily in the same order). They went to tour on eight different months viz, February, April, June, July, August, September, October, December.

- S lives on an even numbered floor. Only three people live between S and T. Only one person lives between T and V. V lives on one of the floors below T. Only two persons live between V and U.

- W lives on a floor that is immediately below U. Only two persons live between T and Q. P does not live on the lowermost floor. The person who owns civic car lives on the floor numbered 7. W owns Amaze. The person who owns Brio lived on the topmost floor went to tour after August.

- The persons who lived on odd numbered floors went to tour on the months which has less than 31 days. The person who went to tour on February lived on one of the floors above the 4th floor.

- The person who lived on the 5th floor went to tour on one of the months after April. The person who lived on the lowermost floor went to tour on one of the months after June and he owns Santro.

- The person who owns Celerio car lived immediately above the 4th floor. The person who went to tour on July owns Amaze. U owns Fabia went to tour on the month before June. The person who owns Micra went to tour on the month after July. V owns Etios went to tour after October

26. Which of the following Statements is true with respect to the given information?

   (a) T lives immediately above the one who owns Civic

   (b) U lives immediately above R

   (c) Only three people live between U and the one who owns Brio.

   (d) W owns Etios

   (e) All the given statements are true

27. Who amongst the following lives exactly between V and the one who owns Brio?

(a) T   (b) P   (c) W   (d) U

(e) R

28. Four of the following cars does W own?

(a) Civic   (b) Celerio   (c) Brio   (d) Amaze

(e) Fabia

29. Four of the following five are alike in a certain way and so form a group. Which one of the following does not belong to the group?

(a) T – Civic   (b) V – Celerio

(c) V – Etios   (d) S – Fabia

(e) U – Amaze

30. How many people live between P and the one who owns Amaze?

(a) Four   (b) Three   (c) Two   (d) Five

(e) None

Direction (31 to 35) : Study the following information carefully to answer the given questions.

Seven people, namely A,B,C,D,E,F and G like seven different flowers namely Rose, Jasmine, Lily, Sun flower, Orchid, Marigold and Daffodil but not necessarily in the same order. Each people also works in the same office but at a different department on the basis of experience namely Administration (ADMIN), Marketing & Sales, (M&S), Accounts (ACC), Production (PO), Quality Management (QM), Human Resources (HR), and Public Relations (PR), but not necessarily in the same order.

Note : Each person has been allocated to a department as per increasing order of experience with the one in ADMIN being the least experienced whilst the one in PR Being the most experienced.

G likes Daffodil and has more experience than the one who likes Rose. Only one person has more experience than A. Only one person has less experience than F. B does not work in QM. The one who has less experience than F likes Sun flower. The one in HR likes Orchid. D has less experience than the one in

PO, but more experience than the one who likes Lily. E neither has the least experience than the one who likes Lily nor he works in QM. The one who likes Jasmine does not work in PO. Only two people have more experience than the one who likes Rose.

31. **As per the given arrangement, ADMIN is related to Lily and PO is related to Rose in a certain way. To which of the following is ACC related to the same way?**
    (a) Jasmine   (b) Lily
    (c) Sun flower   (d) Orchid
    (e) Marigold

32. **Which of the following pairs of people who have more experience than C less experience than E?**
    (a) F, G   (b) F, B   (c) G, A   (d) A, D
    (e) None of the Above

33. **Which combination represents the department that C works in and the flower he likes?**
    (a) QM – Rose (b) PO – Lily
    (c) PO – Marigold   (d) ACC – Sunflower
    (e) ADMIN – Sunflower

34. **Who amongst the following works in ADMIN?**
    (a) A   (b) E   (c) G   (d) B
    (e) Other than those given as options

35. **Which of the following flowers does D like?**
    (a) Lily   (b) Marigold   (c) Rose   (d) Sunflower
    (e) Jasmine

Direction (36 to 40) : Study the following information carefully to answer the given questions.

Seven different Mobile shops – A, B, C, D, E, F and G sold Mobiles starting from Monday to Sunday (of the same week) not necessarily in same order. The number of "Apple Phones" sold by the Seven shops in seven different days are 6, 13, 10, 12, 20, 15 and 27 (not necessarily in same order).

The shop F sold Mobiles on one of the days after the shop which sold 6 Mobiles. The Shop 'A' sold on one of the days after Friday. On Wednesday, the number of Mobiles sold are 12. The difference between the number of Mobiles sold on Monday and Friday is the multiple of the number 7. There are two shops sold mobiles between the shop F and the shop which one sold 6 Mobiles. Shop B sold Mobiles on one of the days immediately before the shop that sold 10 Mobiles. There are two shops sold mobiles between B and G. There are three shops sold mobiles between the shop F and D. C not sold the least number of Mobiles. The sum of Mobiles sold on Wednesday and Saturday is more than ten and the sum equals to the number of Mobiles sold on Friday. The difference between the number of Mobiles sold by Shop B and G is less than five. The Shop which sold 10 Mobiles not on Friday. The shop which sold more than 12 Mobiles(not an odd number) is immediately after the one which sold 12 Mobiles. Shop F sold more number of Mobiles than Shop D.

36. **Which of the following is sold by Shop A?**
    (a) 20   (b) 15   (c) 27   (d) 10
    (e) 13

37. **Which of the following combinations of "Shop – Day – Number of Mobiles" is True with respect to the given arrangement?**
    (a) E – Friday – 15   (b) A – Saturday – 6
    (c) C – Thursday – 20   (d) B – Friday – 13
    (e) E – Thursday – 10

38. **Which of the following shop sold Mobiles immediately after B?**
    (a) D   (b) E   (c) F   (d) A
    (e) None

39. **In this arrangement, A is related to Monday, B is related to Tuesday then F is related to?**
    (a) Tuesday   (b) Wednesday
    (c) None of the given options is true.
    (d) Saturday   (e) Sunday

40. **Which among the following shop sold "Apple Phones" on Tuesday?**
    (a) B   (b) C   (c) A   (d) E
    (e) F

Direction (41 to 45) : Study the following information carefully to answer the given questions.

Seven Persons – A, B, C, D, E, F, and G – live on separate floors of a seven storey-ed building, but not in the same order.

The ground floor of the building is numbered 1, the floor above it 2 and so on until the topmost floor is numbered 7.

Each person likes different vegetables – Cabbage, Potato, Tomato, Onion, Carrot, Radish and Bean, but not necessarily in the same order. Each person has 7 different weight of their favorite vegetables starting from 1kg to 10 kg. The weight of Onion is more than 2 kg. The total weight of Carrot and Radish is 10 kg. The person who likes Onion lives on floor numbered four. A does not live on the lowermost floor. A lives on any odd numbered floor below the one who likes Onion. Only two persons live between A and the person who likes Bean. Only one person lives between B and F. The total weight of Cabbage is square of the total weight of Carrot while The total weight of Bean is square of the total weight of Onion. F lives on an even numbered floor and does not like Onion. Only three persons live between the persons who like Cabbage and Tomato respectively. The person who likes Cabbage live on any floor above the B's floor.

The person who likes Cabbage does not live on the topmost floor. G lives on an even numbered floor but neither immediately above nor immediately below the floor of A. C does not like Cabbage or Tomato. Only two persons live between D and the one who likes Onion. The person who likes Carrot lives on the floor immediately above the floor of the person who likes Raddish. The difference between the weight of the Tomato and Radish is 2 kg. The floor number and the weight of favorite vegetable is same for the person C.

41. **D has how many kg of favourite vegetable?**
    (a) 2 kg   (b) 8 kg   (c) 6 kg   (d) 4 kg
    (e) No one

42. **Which of the following statements is/are true according to the given information?**
    (a) E lives on floor numbered 5 and he does not like Onion
    (b) A likes Carrot and he does not live on floor numbered 4
    (c) C likes Potato and he does not have 6 kg.
    (d) Only two persons live between the floors of E and F
    (e) All the statements are true.

43. **Who among the following lives on the floor immediately above the floor of A?**

    (a) B   (b) F   (c) G   (d) C
    (e) None

44. **Who among the following lives exactly between the floors on which B and F live?**
    (a) F   (b) A   (c) D   (d) C
    (e) None

45. **Who among the following does like Carrot?**
    (a) A   (b) D   (c) B   (d) C
    (e) None

PRACTICE SET

Direction (1 to 5) : Study the following information carefully to answer the given questions

Ten students namely viz A, B, C, D, E, F, G, H, I and J of ten different colleges but not necessarily in the same order have exam on five different days starting from Monday to Friday of the same week. Each student have exam at two different time slots, i.e 08.00 AM or 11. 00 A.M.

Only two people have exam between F and J. Neither E nor G does not have exam on Friday. I has exam on Tuesday at 08.00 A.M. H does not have exam at 10.00 AM. The number of people who have exam between G and D is same as the number of people who have exam between C and H. D does not have exam on any one of the days after E. F does not have exam on any of the days after H. B has exam immediately before I. I does not have exam on any of the days before G. The one who has exam at 08.00 A.M. immediately before J. D has exam immediately after the day of one who has exam on Monday. F does not have exam at 11.00 AM. Only three people have exam between G and E.

1. **How many persons have exam at 11'0 clock between E and H?**
   (a) 5   (b) 6   (c) 2   (d) 4
   (e) None of these

2. **Who among the following person has exam at 8 A.M.?**
   (a) J   (b) H   (c) A   (d) C
   (e) D

3. **Four among the following form a group in a certain way. Which of the following does not belong to Group?**
   (a) B – Tuesday   (b) D – Wednesday
   (c) G – Tuesday   (d) A – Friday
   (e) H – Friday

4. **Which of the following is correctly matched?**
   (a) I – Monday   (b) D – Tuesday
   (c) B – Friday (d) G – Tuesday
   (e) I – Wednesday

5. **Who among the following have exam on Friday?**
   (a) A, B   (b) C, D   (c) E, G   (d) H, J
   (e) G, I

Direction (6 to 10) : Study the following information carefully to answer the given questions.

Eight boxes namely A, B, C, D, E, F, G and H are placed from top to bottom not in the same order. They contain different types of flowers namely viz Jasmine, Rose, Lily, Lotus, Sunflower, Tulip, Orchid and Chrysanthemum. Boxes are made up of different materials among steel, plastic, wood and Aluminum box. Exactly two boxes are made of same material. Consider the box kept at top as 1st position.

Box D which is made up of plastic kept two places above B and both are in the top 4 positions when boxes are arranged from top to bottom. The box containing Lotus is kept immediately below wooden box and made up of same material as D. Box C is kept somewhere between G and H and H being below C. The two Aluminum boxes are kept vertically adjacent to each other. Lily is kept exactly middle between F and the box containing Tulip. H doesn't contain Jasmine. Box E kept two places below box G which is kept immediately below the box containing Lotus. The box containing Chrysanthemum is placed at even numbered place but is not placed at the bottom. The steel box which kept at the top either contains Jasmine or Orchid. Box E, not made up of Aluminum. F which contains Sunflower is made up of wood. The box containing Rose is made up of wood. C doesn't contain Jasmine or Chrysanthemum.

6. **Which of the following box contains Rose?**
   (a) A   (b) D   (c) F   (d) H
   (e) None of these

7. **Which of the following box is made up of wood?**
   (a) A, B   (b) E, F   (c) B, E   (d) D, G
   (e) H, F

8. **Which of the following statements is true?**
   (a) B which contains Lotus is made up of wood
   (b) G which is placed at 5th position is made up of plastic material
   (c) E which contains Tulip is not made up of steel
   (d) H is placed at bottom and is made up of steel.
   (e) None of these

9. **Which of the following is correctly matched?**
   (a) G – Lily – Plastic   (b) F – Sunflower – Wood
   (c) H – Rose – Steel   (d) E – Tulip – Plastic
   (e) D – Chrysanthemum – Wood

10. **What does box G contain?**
    (a) Orchid   (b) Tulip
    (c) Lily   (d) Sand Wich
    (e) Chrysanthemum

Direction (11 to 15) : Study the following information carefully to answer the given questions

Eight people P, Q, R, S, T, U, V, and W were born in three different months(of the same year) but not necessarily in the same order, namely March, June and December such that not less than two people and not more than three people were born in a month. Each of them also likes a different fruit namely Guava, Peach, Banana, Cherry, Mango, Orange, Kiwi and apple but not necessarily in the same order. Each goes to Eight different Universities namely Indian Institute of Science, University of Delhi, Banaras Hindu University, Osmania University, IIT Madras, Shivaji University, Dr. APJ Abdul Kalam Technical University and University of Mumbai but not in necessarily same order Only Q and W were born in March. R likes Apple and was born in the same month as T.

R was not born in December. The one who likes Mango was born in the month which has 30 days only. U was not born in the same month as T. S likes Cherry and born in the same month as

U. V does not like Mango. The one who likes Kiwi and the one who likes Banana were born in the same month, The one who likes Kiwi was not born in the same month as W. U does not like Kiwi. The one who likes Guava was born in the same month as P. Q does not like Peach. T does not like Mango. Three people are there between the one who goes to IIT Madras on one of the months which has more than 30 days and the one who goes to Shivaji University on one of the months which has less than 31 days. Three people are there between the one who goes to Dr. APJ Technical University on one of the months which has more than 30 days and the one who goes to University of Delhi on one of the months which has more than 30 days. Three people are there between the one who goes to Osmania University on one of the months which has less than 30 days and the one who goes to Banaras Hindu University on one of the months which has more than 30 days. V does not go to Neither University of Mumbai nor IIT Madras. W does not go to University of Delhi.

11. **As per the given arrangement which of the following combination represents only the people who were born in December?.**
    (a) T, V   (b) U, P, T   (c) V, U   (d) P, T
    (e) U, V, S

12. **As per the given arrangement which of the following person represent the one who was born in the same month as the one who likes Orange?**
    (a) U   (b) P   (c) R   (d) T
    (e) W

13. **Which of the following fruits does T like as per the given arrangement?**
    (a) Orange   (b) Peach   (c) Guava   (d) Banana
    (e) Other than those given as options

14. **Which of the following combinations is correct as per the given arrangement?**
    (a) December – Peach – Shivaji
    (b) June – Orange – IIT Madras
    (c) June – Banana – Indian Institute of Science
    (d) March – Guava – Osmania
    (e) December – Banana – Banaras Hindu University

15. **Who amongst the following goes to APJ Technical University as per the given arrangement?**
    (a) P   (b) V   (c) U   (d) W
    (e) T

Direction (16 to 20) : Study the following information carefully to answer the given questions

Eight People – A, B, C, D, E, F, G and H live in ten different floors of a building (but not necessarily in the same order). Two of the floors in the building is vacant. The lowermost floor of the building is numbered one, the one above that is numbered two, and so on till the topmost floor is numbered ten. Each one of them also likes different mobiles, namely Lenovo, Apple, ONE PLUS, HTC, Samsung, Oppo, ASUS and Sony(but not necessarily in the same order). Each one of them also participates in different number of events starting from 1 to 10.

The one who likes SONY and APPLE not live on the floors numbered 8 and 7 respectively. The one who likes HTC lives immediately below the floor on which C lives. The number of people living below F is same as the number of people living between F and H. Only three floors between D and the one who likes Samsung. The number of floors between the one who likes ASUS and the one who likes HTC is two. The one who likes Oppo lives immediately above G. F lives an odd numbered floor above the floor numbered four. The top most floor is vacant. Only one person lives between B and the one who likes HTC. Only three floors between G and A. The one who likes SONY lives immediately above the one who likes Lenovo. C lives one of the odd numbered floors above the one who likes Samsung. The number of floors between F and the one who likes APPLE is only one. Only one person lives between the one who likes SONY and the vacant floor. Only two people live between C and vacant floor. The number of floors between two vacant floors is five. Total number of events participated by B is one less than that of the total number of events participated by H. Total number of events participated by the person who lives on ground floor is the square of the total number of events participated by B. Total number of events participated by A is the difference of number of events participated by D and H. Total number of events participated by C is one less than that of B. Total number of events participated by F is one more than that of G. Total number of events participated by E is one more than that of F. Total number of events participated by G is the multiple of number of events participated by B and C. Total number of events participated by the one who likes Asus is four.

16. **Which of the following Statements is true with respect to the given information?**
    (a) G lives immediately above the one who likes Samsung
    (b) E lives immediately above C
    (c) Only three people live between F and the one who likes SONY.
    (d) D likes HT(c)
    (e) All the given statements are true

17. **Who amongst the following participates in 5 events?**
    (a) B   (b) G   (c) F   (d) A
    (c) C

18. **Which of the following floor is immediately above the vacant floor?**
    (a) 5   (b) 7   (c) 4   (d) 3
    (e) 6

19. **Four of the following five are alike in a certain way and so form a group. Which one of the following does not belong to the group?**
    (a) G – ONE PLUS   (b) C – Samsung
    (c) F – HTC   (d) E – Lenovo
    (e) D – APPLE

20. **How many people live between C and D?**
    (a) Four   (b) Three   (c) None   (d) Five
    (e) Two

Direction (21 to 25) : Study the following information carefully to answer the given questions.

Seven people, namely P,Q,R,S,T,U and V like seven different e-commerce websites namely Amazon, Flipkart, Snapdeal, E-bay, Jabong, Myntra and Paytm but not necessarily in the same order. Each people also works in the same office but at a different department on the basis of experience namely Administration (ADMIN), Marketing & Sales, (M&S), Accounts (AC(c), Production (PO), Quality Management (QM), Human Resources (HR), and Public Relations (PR), but not necessarily in the same order. Each person also like different cars namely viz – Audi, BMW, Ford, Fiat, Hyundai, Chevrolet and Ferrari.

Note: Each person has been allocated to a department as per increasing order of experience with the one in ADMIN being the least experienced whilst the one in PR Being the most experienced.

T neither has the least experience than the one who likes Snapdeal. T neither has the least experience nor he works in QM. Q does not work in QM. The one who likes Flipkart does not work in PO. The person who likes Myntra has more experience than the one who likes Fiat. The one in Quality Management likes Chevrolet. The person who likes Jabong also likes the Hyundai car. Persons who have the least experience and most experience like BMW and Ferrari car respectively. Only one person has less experience than U. V likes Paytm and has more experience than the one who likes Amazon. S has less experience than the one in PO, but more experience than the one who likes Snapdeal. The one who has less experience than U likes E-bay. Only one person has more experience than P. P does not like Audi. The one in Marketing and Sales like For D. The one in HR likes Jabong. Only two people have more experience than the one who likes Amazon

21. As per the given arrangement, ADMIN is related to Ferrari and PR is related to Hyundai in a certain way. To which of the following is ACC related to the same way?

(a) Ferrari   (b) BMW   (c) Ford   (d) Fiat
(e) Chevrolet

22. Which of the following pairs of people who have more experience than P less experience than S?

(a) V, P   (b) V, U   (c) R, V   (d) T, Q
(e) R, P

23. Which combination represents the department that T works in and the movie he likes?

(a) QM – Amazon   (b) PO – Snapdeal
(c) PO – Myntra   (d) ACC – E-bay
(e) ADMIN – E-bay

24. Who amongst the following likes Fiat?

(a) S   (b) R   (c) P   (d) Q
(e) Other than those given as options

25. Which of the following e-commerce websites does Q like?

(a) Snapdeal   (b) Myntra   (c) Amazon   (d) E-bay
(e) Flipkart

Directions (26-30): Study the following information and answer the questions given below:

There are three rows i.e. row 1, row 2 and row 3 Such that row 2 is in the north of row 3 and row 1 is in the north of row 2. There are 4 persons sitting in row 1 and 8 persons are sitting in the row 2 and 4 persons are sitting in the row 3.

Persons sitting in the row 3 faces north. Persons sitting in the row 1 faces south. First 4 persons sitting from west to east in row 2 faces north and last four person sitting from west to east in row 2 faces south.

Note: All the persons sitting in the row 1 and row 3 are facing the persons sitting in the row 2.

E faces the one who sits second to the right of P. No one sits on the left of E. Only one person sits between P and R. Only two person sits between R and the one who faces F. D sits immediate right of F. D does not sits at the end of the row. Q sits second to the right of the one who faces D. A face the one who sits on the immediate left of Q. G faces S but does not sits at the end of the row. P is not the immediate 2eighbor of G. Only one person sits between K and S. K faces the one who sits third to the right of N. J and M are immediate neighbours. J does not face D. Only two person sits between M and L. More than two persons sits between B and C, who does not face L. C does not face south.

26. How many persons sit between A and G?

(a) One   (b) None   (c) Three   (d) Two
(e) None of these

27. Who among the following sits second to the right of C?

(a) F   (b) D   (c) G   (d) L
(e) None of these

28. Four of the following five belongs to a group following a certain pattern find the one that does not belong to that group.

(a) ML   (b) CB   (c) RF   (d) ED
(e) KS

29. Which among the following pairs sits at the ends of the rows?

(a) BS   (b) EQ   (c) KG   (d) RM
(e) None of these

30. How many persons sit on the right of L?

(a) Three   (b) One   (c) No one   (d) Four
(e) None of these

8 New Pattern Input Output

LEVEL OF DIFFICULTY-1

Directions (1 to 7) : Study the following information carefully and answer the given questions:

A word and number arrangement machine when given an input line of words and numbers rearranges the following a particular rule in each step. The following is an illustration of input and rearrangement.

Input : Joy far 35 27 16 96 height star
Step I: 96 joy far 35 27 16 height star
Step II: 96 far joy 35 27 16 height star
Step III: 96 far 35 joy 35 27 16 height star
Step IV: 96 far 35 height joy 27 16 star
Step V: 96 far 35 height 27 joy 16 star

And step V is the last step of the rearrangement.

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

1. **Input: Organise 19 12 stable room 35 72 house.**
   How many steps will be required to complete the arrangement?
   (a) Five   (b) Six   (c) seven   (d) Four
   (e) None of these

2. **Input: bake never store 51 26 33 age 49**
   Which of the following will be step V?
   (a) 51 age 49 bake 33 never 26 store
   (b) 51 age 49 bake never store 26 33
   (c) 51 age bake never store 26 33 49
   (d) 51 bake never store 26 33 age 49
   (e) There will be no such step

3. **Input: always go there 39 62 47 time 24**
   Which of the following steps will be the last but one?
   (a) VI   (b) VII   (c) VIII   (d) IX
   (e) None of these

4. **Step II of an input is: 67 ask 34 12 46 for my date**
   Which of the following is definitely the input ?
   (a) 34 12 46 for my date ask 67
   (b) 34 12 46 for my date 67 ask
   (c) 12 34 67 ask 46 for my date
   (d) Cannot be determined   (e) None of these

5. **Step III of an input is: 84 for 56 29 17 won loss game**
   Which of the following steps will be the last?
   (a) VIII   (b) IX   (c) VII   (d) V
   (e) None of these

6. **Step III of an input is: 86 box 63 18 gear card 51 new**
   How many more steps will be required to complete the arrangement?
   (a) Three   (b) Two   (c) Four   (d) Five
   (e) None of these

7. **Step IV of an input is: 59 bend 46 card 14 27 win now**
   Which of the following will be step VII?
   (a) 59 bend 46 card now 27 win 14
   (b) 59 bend 46 card 27 now win 14
   (c) 59 bend 46 card 27 now 14 win
   (d) 59 bend 46 card 27 14 win now
   (e) There will be no such step

Directions (8 to 14) : Study the following information to answer the given questions.

A word and number arrangement machine when given an input line of words and numbers, rearranges them following a particular rule. The following is an illustration of input and rearrangement. (All the numbers are two-digits numbers)

Input   at 52 93 46 gate join us 19 to 33 dine 27
Step I   19 at 52 46 gate join us to 33 dine 27 93
Step II   27 19 at 46 gate join us to 33 dine 93 52
Step III   33 27 19 at gate join us to dine 93 52 46
Step IV   at 33 27 19 gate join to dine 93 52 46 us
Step V   dine at 33 27 19 gate join 93 52 46 us to
Step VI   gate dine at 33 27 19 93 52 46 us to join

Step VI is the last step of the arrangement of the above input as the intended arrangement is obtained.

As per the rules followed in the above steps, find one in each of the following questions the appropriate steps for the given input, input for the questions

Input "71 14 side wall 97 for hat 65 27 gun 81 bat" (All the numbers given in the arraignment are two-digit numbers)

8. **How many steps are required to complete the arrangement**
   (a) four   (b) five   (c) Six   (d) Seven
   (e) Eight

9. **Which word/number would be at the 7th position from the right in Step V?**
   (a) hat   (b) gun   (c) for   (d) side
   (e) 14

10. **Which of the following would the step III?**
    (a) for bat 65 27 14 hat gun 97 81 71 wall side

(b) 65 27 14 side wall for hat bat gun 97 81 71

(c) 65 27 14 side wall for hat gun bat 71 81 97

(d) 65 27 14 side wall for hat gun bat 97 81 71

11. **Which step number would be the following output?**
    bat 65 27 14 side gun hat for 97 81 71 wall
    (a) Step III   (b) Step VI
    (c) Step II   (d) Step V
    (e) There will be no such step

12. **Which of the following represents the position of '71'**
    in Step II of the given input?
    (a) Ninth from the right   (b) Second from the left
    (c) Seventh from the right
    (d) Third from the left
    (e) Fourth from the right

13. **In the last step of the arrangement, 'for' is related to**
    '65' following a particular pattern, in the same way
    '97' is related to '71'. 'wall' is related to which of the
    following, if the same pattern is followed?
    (a) gun   (b) hat   (c) 81   (d) for
    (e) side

14. **Which word/number would be at the 5th position**
    from the left in step I?
    (a) 97   (b) 27   (c) side   (d) hat
    (e) for

Directions (15 to 19) : Study the following information carefully and answer the given questions:

A word and number arrangement machine when given an input line of words and numbers rearranges following a particular rule in each step. The following is an illustration of input and rearrangement.

    Input : cup for hot 34 69 72 tea 27
    Step I : 27 cup for hot 34 69 72 tea
    Step II: 27 tea cup for hot 34 69 72
    Step III: 27 tea 34 cup for hot 69 72
    Step IV: 27 tea 34 hot cup for 69 72
    Step V: 27 tea 34 hot 69 cup for 72
    Step VI: 27 tea 34 hot 69 for cup 72
    Step VII: 27 tea 34 hot 69 for 72 cup

And step VII is the last step of the rearrangement.

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

15. **Input: kind 12 96 heart water 59 42 yes**
    How many steps will be required to complete the
    rearrangement?
    (a) Three   (b) Four   (c) Five   (d) Six
    (e) None of these

16. **Input: Jungle 43 mode 25 basket 39 target 19**
    Which of the following steps will be the last but one?
    (a) VII   (b) VIII   (c) IX   (d) VI
    (e) None of these

17. **Step III of an input is : 12 world 31 ask cart ball 87 75**
    Which of the following will definitely be the input?

(a) 31 ask cart ball 87 75 world 12

(b) 31 ask cart ball 87 75 12 world

(c) 31 ask 12 world cart ball 87 75

(d) Cannot be determined

(e) none of these

18. **Step II of an input is: 24 year 56 43 last part 64 over**
    How many more steps will be required to complete
    the rearrangement?
    (a) Five   (b) Six   (c) Seven   (d) Four
    (e) None of these

19. **Step III of an input is : 32 station 46 81 73 march go**
    for
    Which of the following will be step VI?
    (a) 32 station 46 march 73 go for 81
    (b) 32 station 46 march 73 81 go for
    (c) 32 station 46 march 73 go 81 for
    (d) There will be no such step
    (e) None of these

Directions(20 to 24): Study the following information carefully and answer the given questions:

A word and number arrangement machine when given an input line of words and numbers rearranges the following a particular rule in each step. The following is an illustration of input and rearrangement.

    Input: 17 put show on 39 27 85 gold
    Step I: Show 17 put on 39 27 85 gold
    Step II: Show 85 17 put on 39 27 gold
    Step III: show 85 put 17 on 39 27 gold
    Step IV: show 85 put 39 on 27 gold
    Step V: Show 85 put 39 on 17 27 17 gold
    Step VI: show 85 put 39 on 27 gold
    Step VII: Show 85 put 39 on 27 gold 17

And step VII is the last step of the rearrangement of the above input.

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

20. **Input: glass full 15 37 water now 85 67**
    Which of the following will be step VI of the above
    input?
    (a) Water 85 now 67 glass 15 37
    (b) water 85 now 67 glass full 15 37
    (c) water 85 now 67 glass 37 full 15
    (d)There will be no such step
    (e) None of these

21. **Step II of an input is:**
    Ultra 73 12 16 mail sort 39 kite
    Which of the following steps will be the last but one?
    (a) VIII   (b) IX   (c) VII   (d) VI
    (e) None of these

22. **Step III of an input is:**
    Win 75 voice 15 39 store gap 26
    Which of the following is definitely the input?

(a) Voice 15 win 75 39 store gap 26

(b)voice win 75 15 39 store gap 26

(c) 15 75 win voice store gap 26

(d) cannot be determined

(e) None of these

23. **Step II of an input is:**

Tube 83 49 34 garden flower rat 56

How many more steps will be required to complete the rearrangement?

(a) Four   (b) Five   (c) six   (d) Three

(e) None of these

24. **Input: Hunt for 94 37 good 29 48 book**

How many steps will be required to complete the rearrangement?

(a) Four   (b) five   (c) Six   (d) Seven

(e) None of these

Directions (25 to 27) : Study the following information carefully and answer the given questions:

A word and number arrangement machine when given an input line of words and numbers rearranges the following a particular rule in each step. The following is an illustration of input and rearrangement.

Input : gone 93 over 46 84 now for 31

Step I: 31 gone 93 over 49 84 now for

Step II: 31 over gone 93 46 84 now for

Step III: 31 over 46 gone 93 84 now for

Step IV: 31 over 46 now gone 93 84 for

Step V: 31 over 46 now 84 gone 93 for

And step V is the last step of the rearrangement of the above input.

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

25. **Step III of an input: 15 window 29 93 86 sail tower buy**

Which of the following will be step VI?

(a) 15 window 29 tower 86 sail 93 buy

(b) 15 window 29 tower 86 93 sail buy

(c) 15 window 29 tower 93 86 sail buy

(d) There will be no such step

(e) None of these

26. **Input: station hurry 39 67 all men 85 59**

How many steps will be required to complete the rearrangement?

(a) Four   (b) Five   (c) Six   (d) Three

(e) None of these

27. **Step II of an input is : 49 zone car battery 56 87 71 down**

Which of the following is definitely the input?

(a) car 49 battery zone 56 87 71 down

(b) zone 49 car battery 56 87 71 down

(c) battery car 49 zone 56 87 71 down

(d) cannot be determined

(e) None of these

Directions (28 to 32): Answer the questions on the basis of the information given below. A number arrangement machine when given an input of words/numbers, rearranges them following a particular rule in each step. The following is an illustration of input and steps of rearrangement.

Input: 12 exotic large 56 37 online 19 unique cross 61 paint 42

Step 1: exotic large 56 37 online 19 unique cross 61 paint 42 12

Step 2: 19 exotic large 56 37 online unique 61 paint 42 12 cross

Step 3: online 19 exotic large 56 37 unique 61 paint 12 cross 42

Step 4: 37 online 19 exotic 56 unique 61 paint 12 cross 42 large

Step 5: unique 37 online 19 exotic 61 paint 12 cross 42 large 56

Step 6: 61 unique 37 online 19 exotic 12 cross 42 large 56 paint

This is the final arrangement and step 6 is the last step for this input.

Input: admin 47 51 upscale daily safe 13 36 ideal 18 mail 62

28. **What is the position of 'upscale' in step 4 from right end?**

(a) 3rd   (b) 4th   (c) 7th   (d) 6th

(e) 8th

29. **In step 6, if '51' is related to ideal' and '47' is related to 'admin' in a certain way, then 'daily' is related to which of the following?**

(a) safe   (b) 62   (c) 13   (d) mail

(e) None of these

30. **How many words/numbers are there between 'ideal' and '18' in step 5?**

(a) None   (b) One   (c) Two   (d) Three

(e) More than three

31. **Which of the following is second to right of sixth word/number from right end in step 3?**

(a) admin   (b) safe   (c) mail   (d) 62

(e) 51

32. **Which of the following is the last but one step of given input?**

(a) 51 upscale 47 ideal 13 admin 18 daily 36 mail 62 safe

(b) upscale 47 ideal 13 admin 51 safe 18 daily 36 mail 62

(c) upscale 13 ideal 47 admin 51 safe 18 daily 36 mail 62

(d) 47 upscale ideal 13 admin 51 safe 18 daily 36 mail 62

(e) None of these

Directions (33 to 37) : Answer the questions on the basis of the information given below.

A number arrangement machine when given an input of numbers/words, rearranges them following a particular rule in each step. The following is an illustration of input and steps of rearrangement.

Input: 44 First Engine 22 17 Product Mania 25 Illicit Outer 60 41

Step 1: Engine 44 First 22 17 Product Mania 25 Illicit Outer 41 60

Step 2: Engine 17 44 First 22 Mania 25 Illicit Outer 41 Product 60

Step 3: Engine 17 Illicit First 22 Mania 25 Outer 41 44 Product 60

Step 4: Engine 17 Illicit 25 First 22 Outer 41 Mania 44 Product 60

Step 5: Engine 17 Illicit 25 Outer First 41 22 Mania 44 Product 60

Step 6: Engine 17 Illicit 25 Outer 41 First 22 Mania 44 Product 60

Step 7: Engine 64 Illicit 49 Outer 25 First 16 Mania 64 Product 36

This is the final arrangement and step 7 is the last step for this input.

Input: 18 cotton interest 42 43 access 27 unique replace 65 58 lamp

33. **Which word/number is third to right of ninth element from right end in step 4?**
    (a) cotton   (b) interest   (c) 65   (d) 43
    (e) None of these

34. **In step 5, if '27' interchanges position with 'cotton' and 'unique' with '42', then which word is exactly cotton '27' and 'unique'?**
    (a) 18   (b) 65   (c) interest
    (d) lamp   (e) None of these

35. **How many words are there in cotton words '18' and '65' in step 3?**
    (a) Four   (b) Three   (c) Two   (d) One
    (e) None of these

36. **Which step number is following step? Step: access 27 interest 43 unique cotton 18 65 lamp 42 replace 58**
    (a) 5   (b) 2   (c) 7   (d) 1
    (e) There is no such step

37. **Find the difference in numbers which is 5th from right end in step 3 and 4th from left end in step 7.**
    (a) 9   (b) 31   (c) 16   (d) 28
    (e) 22

Directions (38 to 42): Answer the questions on the basis of the information given below.

A number arrangement machine when given an input of words/numbers, rearranges them following a particular rule in each step. The following is an illustration of input and steps of rearrangement.

Input: 29 google 55 microsoft amazon 46 nokia 13 samsung 34

Step 1: amazon 29 google 55 microsoft 46 nokia 13 samsung 34

Step 2: amazon 29 google 55 microsoft 46 nokia samsung 34 11

Step 3: amazon google 29 55 microsoft 46 nokia samsung 34 11

Step 4: amazon google 55 microsoft 46 nokia samsung 34 11 31

Step 5: amazon google microsoft 55 46 nokia samsung 34 11 31

Step 6: amazon google microsoft 55 46 nokia samsung 11 31 32

Step 7: amazon google microsoft nokia 55 46 samsung 11 31 32

Step 8: amazon google microsoft nokia 55 samsung 11 31 32 48

Step 9: amazon google microsoft nokia samsung 55 11 31 32 48

Step 10: amazon google microsoft nokia samsung 11 31 32 48 53

This is the final arrangement and step 10 is the last step for this input. Input: loan 55 part copy 18 43 gain 48 allow 22

38. **What is the position of 'part' in step 4 from right end?**
    (a) 3rd   (b) 4th   (c) 5th   (d) 6th
    (e) 8th

39. **In step 6, if 'copy' is related to 'loan' and '55' is related to '48' in a certain way, then 'part' is related to which of the following?**
    (a) loan   (b) 55   (c) 16   (d) 48
    (e) None of these

40. **How many steps are done to complete the output?**
    (a) 6   (b) 7   (c) 8   (d) 9
    (e) 10

41. **How many words are between 'gain' and '16' in step 7?**
    (a) 3   (b) 4   (c) 2   (d) 5
    (e) There is no such step

42. **Which of the following is the last but one step of given input?**
    (a) allow copy gain loan part 16 24 41 50 53
    (b) allow copy gain loan 55 part 16 24 41 50
    (c) allow copy gain loan part 55 16 24 41 50
    (d) allow copy gain loan part 55 18 24 41 50
    (e) None of these

Directions (43 to 47): Answer the questions on the basis of the information given below.

A number arrangement machine when given an input of words/numbers, rearranges them following a particular rule in each step. The following is an illustration of input and steps of rearrangement.

Input: fog 13 angle post 75 26 lamp 31 earn 58 outer 79

Step 1: 131 fog angle post 75 lamp 31 iearn 58 outer 79 262

Step 2: angle 131 post 75 lamp 31 iearn 58 outer 79 262 fog

Step 3: 313 angle 131 post 75 lamp earn outer 79 262 fog 585

Step 4: earn 313 angle 131 post 75 outer 79 262 fog 585 lamp

Step 5: 757 earn 313 angle 131 post outer 262 fog 585 lamp 797

Step 5: outer 757 earn 313 angle 131 262 fog 585 lamp 797 post

This is the final arrangement and step 6 is the last step for this input.

Input: 28 hut under 75 out 45 12 break 21 pot 63 east

43. **What is the position of '212' in step 5 from right end?**
    (a) 7th (b) 9th (c) 5th (d) 4th
    (e) 8th

44. **In step 6, if 'out' is related to '212' in the same way as in step 2, '75' is related to '63' in a certain way, then in step 3, 'under' is related to which of the following in the same way?**
    (a) pot (b) 212 (c) 121 (d) break
    (e) 63

45. **What is the sum of numbers – 6th from the left end in step 3 and 4th from the right end in step 4?**
    (a) 258 (b) 287 (c) 232 (d) 265
    (e) 239

46. **In which of the following step number do the words/numbers '121 212 break 454' occur together?**
    (a) 2 (b) 4 (c) 3 (d) 6
    (e) 5

47. **How many words/numbers are there between '121' and '63' in step 4?**
    (a) 2 (b) 5 (c) 3 (d) 4
    (e) None of these

Directions (48 to 52): Answer the questions on the basis of the information given below. A number arrangement machine when given an input of words/numbers, rearranges them following a particular rule in each step. The following is an illustration of input and steps of rearrangement.

Input: ancient 16 draft upper 52 39 earn portal 63 32 hence 21

Step 1: upper ancient draft 52 39 earn portal 63 32 hence 21 18

Step 2: 22 upper ancient draft 52 39 earn 63 32 hence 18 portal

Step 3: earn 22 upper ancient draft 52 39 63 hence 18 portal 34

Step 4: 40 earn 22 upper ancient draft 52 63 18 portal 34 hence

Step 5: ancient 40 earn 22 upper draft 63 18 portal 34 hence 54

Step 6: 64 ancient 40 earn 22 upper 18 portal 34 hence 54 draft

This is the final arrangement and step 6 is the last step for this input.

Input: 68 occupy 23 55 factor early 22 kind 34 ideal 17 safe

48. **How many words/numbers are between 'ideal' and 'factor' in step 5?**
    (a) 3 (b) 5 (c) 2 (d) 6
    (e) 4

49. **Which word/number is second to left of fifth element from the right end in step 4?**
    (a) safe (b) factor (c) 68 (d) 55
    (e) early

50. **In step 6, 'early' is related to '18' in the same way as in step 3, '68' is related to 'factor'. Now in step 5, 'factor' is related to what in the same way?**
    (a) kind (b) safe (c) 24 (d) occupy
    (e) None of these

51. **In which of the following step numbers do words '68 55 factor 24' occur together?**
    (a) 9 (b) 4 (c) 6 (d) 5
    (e) There is no such step

52. **What is the sum of numbers which is 4th from left end in step 3 and which is 5th from right end in step 5?**
    (a) 71 (b) 84 (c) 67 (d) 92
    (e) None of these

LEVEL OF DIFFICULTY-2

Direction (1 to 5) : Study the following information carefully and answer the given questions.

A number arrangement machine arranges two digit numbers into a typical manner. Each step takes gives output taking input from the previous step. The following is an illustration of Input and rearrangement. Using the illustration answer the question given below.

Example:

| 1 2 | 2 1 | 3 1 | 2 3 | 3 3 | 4 2 |

| 3 4 | 6 3 | 6 4 |

| 1 5 | 1 1 |

| 5 | 1 |

| –4 |

Input:

| 1 2 | 2 2 | 3 1 | 1 3 | 2 3 | 2 1 |

1. If the value "5" is subtracted from the final output then what will be the resultant value?
   (a) –7   (b) 3   (c) –3   (d) 4
   (e) None of these

2. If in the first step the first digit of every number is added and multiplied by 5 then which will be the resultant value?
   (a) 50   (b) 60   (c) 55   (d) 65
   (e) None of these

3. Which of the following combinations represent the first digit of the second value and the second digit of the first value in Step I of the given input?
   (a) 6, 4   (b) 4, 6   (c) 6, 2   (d) 2, 8
   (e) 2, 4

4. Which of the following represents the sum of the first digit of the first value in step first and the second digit of the first value in Step II of the given input?
   (a) 5   (b) 2   (c) 6   (d) 4
   (e) 3

5. Which of the following represents the difference between the first value and the second value of Step II of the given input?
   (a) 8   (b) 7   (c) 9   (d) 4   (e) 6

Direction (6 to 10) : Study the following information carefully and answer the given questions. A number arrangement machine arranges two digit numbers into a typical manner. Each step takes gives output taking input from the previous step. The following is an illustration of Input and rearrangement. Using the illustration answer the question given below.

Example :

| 3 1 | 1 3 | 2 1 | 1 2 | 1 4 | 4 1 |

| 6 1 | 4 3 | 2 4 |

| 2 4 | 1 6 |

| 2 | 6 |

| 8 |

Input:

| 1 2 | 2 1 | 1 3 | 3 1 | 2 2 | 2 4 |

6. If the value "6" is added to the final output then what will be the resultant value?
   (a) 12   (b) 18   (c) 10   (d) 11
   (e) None of these

7. If in the first step the second digit of every number is added and divided by 2 then which will be the resultant value?
   (a) 5   (b) 6   (c) 7   (d) 4
   (e) None of these

8. Which of the following combinations represent the first digit of the third value and the second digit of the first value in Step I of the given input?
   (a) 4, 1   (b) 1, 4   (c) 2, 6   (d) 4, 6
   (e) 4, 4

9. Which of the following represents the sum of the second digit of the second value and the first digit of the first value in Step II of the given input?
   (a) 8   (b) 7   (c) 6   (d) 4
   (e) 9

10. Which of the following represents the difference between the first value and the second value of Step III of the given input?
   (a) 1   (b) 2   (c) 0   (d) 4
   (e) 5

Directions (11–15): A string of numbers is given as input. The further steps given are obtained by applying certain logic. Numbers of step II have been obtained by using at least 1 digit of each number in step I. Each step is a resultant of previous step only.

| 6 8 | 8 3 | 7 9 | 2 1 | 3 1 | 4 8 |

Step I : | 4 7 | | 5 2 | | 3 1 |

Step II : | 1 7 | | 1 3 |

Step III : | 8 | | 4 |

Step IV : | 6 |

Input:

| 8 5 | | 4 6 | | 5 8 | | 2 2 | | 2 1 | | 3 7 |

11. **Which number is greatest in step 1?**
(a) 53 (b) 25 (c) 63 (d) 60
(e) Other than options given

12. **What is the second smallest number obtained in any step of given input?**
(a) 8.5 (b) 7.5 (c) 3 (d) 10.5
(e) 7

13. **Find the difference between sum of numbers obtained in 1st step and sum of numbers obtained in all other steps.**
(a) 61 (b) 67 (c) 89 (d) 72
(e) 76

14. **What is the difference between the second largest number and the smallest number obtained in any steps?**
(a) 24 (b) 18 (c) 15 (d) 29
(e) 21

15. **What is the average of numbers obtained in last 2 steps?**
(a) 4 (b) 5 (c) 9 (d) 7
(e) None of these

Directions (16 to 20): A string of numbers is given as input. The further steps given are obtained by applying certain logic. Numbers of step II have been obtained by using at least 1 digit of each number in step I. Each step is a resultant of previous step only.

| 2 4 | 3 6 | 5 1 | 4 1 | 3 1 | 1 7 |

Step I : | 8 4 | | 9 6 | | 5 7 |

Step II : | 2 2 | | 1 7 |

Step III : | 0 | | 6 |

Step IV : | 3 |

Input:

| 4 1 | | 7 2 | | 9 1 | | 2 5 | | 1 3 | | 1 6 |

16. **What is the average of numbers obtained in last 2 steps?**
(a) 8 (b) 5 (c) 3 (d) 6
(e) 4

17. **What is the smallest number obtained in any step of given input?**
(a) 6 (b) 4 (c) 3 (d) 2
(e) 7

18. **Find the difference between sum of numbers obtained in 1st step and sum of numbers obtained in all other steps.**
(a) 204 (b) 217 (c) 189 (d) 222
(e) 176

19. **What is the difference between the largest and the second smallest numbers obtained in any steps?**
(a) 92 (b) 108 (c) 115 (d) 69
(e) 81

20. **Digit 7 repeats how much times in any numbers obtained in all steps?**
(a) Three (b) Five (c) One (d) Two
(e) None

Directions (21–25): A string of numbers is given as input. The further steps given are obtained by applying certain logic. Numbers of step II have been obtained by using at least 1 digit of each number in step I. Each step is a resultant of previous step only.

| 9 3 | 4 5 | 9 8 | 6 1 | 3 1 | 1 3 |

Step I : | 3 2 | | 1 4 | | 8 5 |

Step II : | 1 5 | | 6 4 |

Step III : | 3 | | 5 |

Step IV : | 8 |

Input:

| 8 2 | | 9 5 | | 9 7 | | 4 1 | | 5 2 | | 1 1 |

21. **What is the average of numbers obtained in step 2?**
(a) 53 (b) 66 (c) 75 (d) 60
(e) Other than options given

22. **What is the second smallest number obtained in any step of given input?**
(a) 8.5 (b) 7.5 (c) 3 (d) 10.5
(e) 7

23. **Find the difference between sum of numbers obtained in 1st step and sum of numbers obtained in all other steps.**
(a) 28 (b) 25 (c) 29 (d) 26
(e) 27

24. **What is the difference between the second largest and the third smallest numbers obtained in any steps?**
(a) 75.5 (b) 74.5 (c) 76.5 (d) 71.5
(e) 73.5

25. **What is the average of numbers obtained in last 2 steps?**
(a) 4 (b) 5 (c) 9 (d) 7
(e) 6

Directions (26 to 30): A string of numbers is given as input. The further steps given are obtained by applying certain logic. Numbers of step II have been obtained by using at least 1 digit of each number in step I. Each step is a resultant of previous step only.

| 2 1 | 3 3 | 9 2 | 4 9 | 2 1 | 1 2 |

Step I : | 8 9 | | 6 3 | | 9 4 |

Step II : | 5 7 | | 3 1 |

Step III : | 6 | | 2 |

Step IV : | 4 |

Input:

| 4 2 | | 1 3 | | 6 3 | | 2 3 | | 5 3 | | 1 2 |

26. **What is the average of numbers obtained in step II and III?**
    (a) 28.5   (b) 26   (c) 25.5   (d) 29
    (e) Other than options given

27. **What is the second largest number obtained in any step of given input?**
    (a) 86   (b) 59   (c) 66   (d) 60   (e) 67

28. **Find the difference between sum of numbers obtained in step I and sum of numbers obtained in all other steps.**
    (a) 98   (b) 85   (c) 109   (d) 86   (e) 95

29. **What is the difference between the third largest and the second smallest numbers obtained in any steps?**
    (a) 45.5   (b) 64   (c) 49   (d) 57
    (e) 53.5

30. **How many numbers obtained in any steps are greater than 50?**
    (a) Six   (b) Four   (c) Three   (d) None
    (e) Five

Directions (31 to 35): A string of numbers is given as input. The further steps given are obtained by applying certain logic Numbers of step II have been obtained by using at least 1 digit of each number in step I. Each step is a resultant of previous step only. None of the exact logic is repeated in any step.

| 2 3 | 1 7 | 4 2 | 3 3 | 5 1 | 2 3 |

Step I : | 6 9 | | 5 7 | | 8 6 |

Step II : | 2 2 | | 5 7 |

Step III : | 2 | | 6 |

Step IV : | 4 |

Input:

| 4 3 | | 8 2 | | 1 3 | | 1 2 | | 1 4 | | 6 3 |

31. **What is the average of numbers obtained in step II and step IV?**
    (a) 33.4   (b) 16.3   (c) 22.3   (d) 23.6
    (e) Other than options given

32. **What is the second smallest number obtained in any step of given input?**

(a) 2   (b) 4   (c) 6   (d) 5
(e) 7

33. **Find the difference between sum of numbers obtained in 1st step and sum of numbers obtained in all other steps.**
    (a) 118   (b) 102   (c) 112   (d) 173
    (e) 126

34. **What is the difference between the second largest and the third smallest numbers obtained in any steps?**
    (a) 63   (b) 40   (c) 74   (d) 61
    (e) 55

35. **What is the average of numbers obtained in last 2 steps?**
    (a) 6   (b) 2   (c) 5   (d) 4
    (e) None of these

Directions (36 to 40): A string of alphabets is given as input. The further steps given are obtained by applying certain logic. Alphabets of step II have been obtained by using at least 1 digit of each number in step I. Each step is a resultant of previous step only. None of the exact logic is repeated in any step.

| C S | B M | B D | H A | K B | G E |

Step I : | X S | | V Z | | N T |

Step II : | C B | | B E |

Step III : | E | | G |

Step IV : | B |

Input:

| D R | | E G | | B A | | C A | | D C | | H M |

36. **Which alphabet occurs exactly 3 times in any steps?**
    (a) L   (b) F   (c) R   (d) U
    (e) Other than options given

37. **What is the sum of numbers corresponding to each alphabet in step II? (Taking A = 1, B = 2, ...Z = 26)**
    (a) 18   (b) 19   (c) 15   (d) 13
    (e) 11

38. **Let @ is the sum of numbers corresponding to each alphabet in step III. What is the alphabet corresponding to @? (Taking A = 1, B = 2, ...Z = 26)**
    (a) L   (b) M   (c) P   (d) O
    (e) Q

39. **How many alphabets appear more than once in any step?**
    (a) 3   (b) 2   (c) 4   (d) 1
    (e) 5

40. **In step I, what is the number corresponding to the alphabet which is also present in 'PACT'?**
    (a) 16   (b) 3   (c) 1   (d) 20
    (e) None of P, A, C, T is present

PRACTICE SET

Direction (1 to 5) : Study the following information carefully and answer the given questions.

The following is an illustration of Input and rearrangement. Using the illustration answer the question given below.

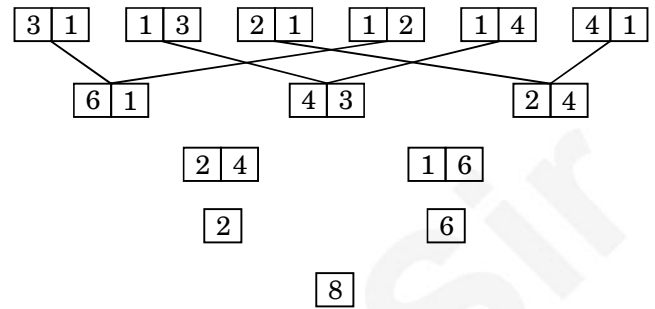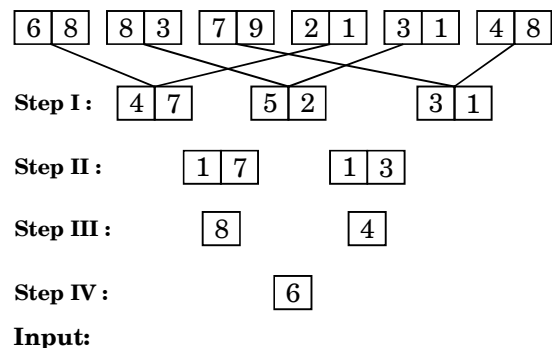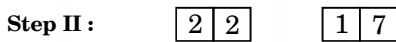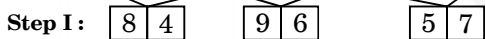**Step–I:** Interchange the Alphabets/Numbers(follow the same pattern as shown in Figure.

Step–II:

(a) If both letters are Vowel and number is less than 6, then vowels change to next letter in English alphabetical series and add 2 to the number

(b) If both letters are consonant and number is greater than 6 or equal to, then consonants change to the previous letter in English alphabetical series and subtract 3 from the number

(c) If both letters are Vowel and number is greater than 6 or equal to, then vowels change to the previous letter in English alphabetical series and subtract 3 from the number

(d) If both letters are consonant and number is less than 6, then consonants change to next letter in English alphabetical series and add 3 to the number

(e) If there are one vowel and one consonant, then vowel change to next letter and consonant change to the previous letter and add 2 to the number.

(f) If there is single consonant, then consonant change to the previous letter and Subtract 3 from the number.

(g) If there is a single vowel, then vowel change to next letter and add 3 to the number. Step–III: Follow Both Steps I and II

Example:

IE 9	E 3	OI 5
C 8		QR 5
AB 4	CB 7	F 4

Step I			Step II			Step III		
F4	CB 3	AB 4	EI	DC 6	BA 1	GC 3	E 3	OI 9
QR 8		C 5	PQ 5		B2	A 2		QR 5
OI 5	E 7	IE 9	PJ 7	F10	HD 6	AB 3	ED 7	F 4

Input:

C 7	E 4	CD 4
EU 8		MN 7
CU 5	IO 4	D 8

1. **In Step III, what is the sum of numbers in the first row?**
   (a) 15   (b) 11   (c) 12   (d) 13
   (e) None of these

2. **In Step III, what is the difference between the sum of numbers in the first row and the sum of numbers in the third row?**
   (a) 5   (b) 6   (c) 3   (d) 4
   (e) None of these

3. **In Step II, what is the product of the sum of numbers in the first column and the sum of numbers in the third column?**
   (a) 245   (b) 285   (c) 275   (d) 255
   (e) 235

4. **In Step II, If the sum of the numbers in the third row is divided by the sum of numbers in the second row then what will be the resultant?**
   (a) 8   (b) 7   (c) 6   (d) 4
   (e) 2

5. **In Step I, which of the following letter/number occur more than twice?**
   (a) E   (b) U   (c) 7   (d) 4
   (e) 8

Direction (6 to 10) : Study the following information carefully and answer the given questions.

The following is an illustration of Input and rearrangement. Using the illustration answer the question given below.

Step–I : Interchange the Alphabets/Numbers(follow the same pattern as shown in Figure.

Step–II :

(a) If both letters are Vowel and number is less than 5, then vowels change to next letter in English alphabetical series and add 2 to the number

(b) If both letters are consonant and number is greater than 5 or equal to, then consonants change to the previous letter in English alphabetical series and subtract 3 from the number

(c) If both letters are Vowel and number is greater than 5 or equal to, then vowels change to the previous letter in English alphabetical series and subtract 3 from the number

(d) If both letters are consonant and number is less than 5, then consonants change to next letter in English alphabetical series and add 3 to the number

(e) If there are one vowel and one consonant, then vowel change to next letter and consonant change to the previous letter and add 2 to the number.

(f) If there is single consonant, then consonant change to the previous letter and Subtract 3 from the number.

(g) If there is a single vowel, then vowel change to next letter and add 3 to the number. Step–III: Follow Both Steps I and II

Example:

IE 5	C 5	D 5
NP 4	⊠	KE 3
AM 7	E 4	UO 3

Step I		
IE3	E4	D7
KE 3		NP 4
AM5	C5	UO 5

Step II		
JF5	F 7	C 4
JF5		OQ 7
BL8	B 7	TN 2

Step III		
KG 5	E 3	B 5
PP 9		IE 2
CM 7	E 4	SM 2

Input

K 6	M 7	EU 8
CF 7	⊠	EG 8
HL 4	E 5	KO 4

6. **In Step III, what is the sum of numbers in the first row?**

(a) 5 (b) 1 (c) 2 (d) 8

(e) None of these

7. **In Step III, what is the difference between the sum of numbers in the second row and the sum of numbers in the third row?**

(a) 5 (b) 6 (c) 1 (d) 4

(e) None of these

8. **In Step II, what is the product of the sum of numbers in the first column and the sum of numbers in the third column?**

(a) 218 (b) 288 (c) 278 (d) 256

(e) 236

9. **If the sum of the numbers in the second column of Step I is divided by sum of the numbers in the second column of Step II then what will be the resultant?**

(a) 8 (b) 7 (c) 6 (d) 3

(e) 1

10. **In Step I, which of the following letter/number occur more than twice?**

(a) E (b) K (c) 7 (d) 4

(e) 8

Directions (11 to 15): Consider the following steps for given input and read the instructions to reach to the last step.

A 1	UM 6	S4
CJ 8	⊠	E 5
P 3	QF 2	TIO

Step I		
AO	UM 2	S 3
CJ 8		E 8
P 4	QF 6	TI 1

Step II		
AO	UM 6	T 3
BI 5		E 8
Q 4	QF 6	TI 5

Step III		
B 5	TM 7	U 4
BH 9		F 8
R 3	QF 4	TH 1

Instructions:

Step–I: Interchange the alphabets in input as arrows mentioned

Step–II: (i) If both letters are consonant and number is less than 6, then consonants change to previous letter in English alphabetical series.

(ii) If there is one vowel and one consonant, then add 4 to the number.

(iii) It there is single consonant, then consonant changes to next letter in English alphabetical series.

Step–III: has been derived using a special pattern taking similar (but not exactly) patterns of both step I and step II.

Input :

O 2	E 6	BT 3
MS 4		UC 1
IN 6	K 4	L 8

11. **What is the sum of all numbers in step II of given input?**

(a) 42 (b) 40 (c) 33 (d) 36

(e) 43

12. **In last step, which of the following letter/s occur more than 1 time?**

(a) C (b) P (c) N

(d) Both T and F (e) Both N and T

13. **Which of the following represents the second element in 3rd row in step III?**

(a) L4 (b) M4 (c) L6 (d) N4

(e) M3

14. **What is the addition of numbers which are with L and LR in step II?**

(a) 7 (b) 5 (c) 6 (d) 3

(e) 4

15. **What is the addition of numbers which are with N, BT and TC in step III?**

(a) 17 (b) 13 (c) 16 (d) 15

(e) 19

Directions (16 to 20): Consider the following steps for given input and read the instructions to reach to the last step.

I 8	KE 1	O 6
AN 4	⊠	T 3
Z 2	MF 6	ST 5

Step I

ST8	MF 1	Z 6
T 4		AN 3
O 2	KE 6	I 5

Step II

ST 8	NE 1	Z 8
T 6		AO 3
N 2	LE 6	H 5

Step III

TS 7	NF 4	X 8
R 6		AP 6
L 2	LF 9	F 5

Instructions:

Step–I: Interchange the alphabets in input as arrows mentioned

Step–II: (i) If both letters are consonant and number is less than 5, then 1st consonant changes to next letter and 2nd consonant changes to previous letter in English alphabetical series.

(ii) If there is one vowel and one consonant, then consonant changes to next letter in English alphabetical series.

(iii) It there is single consonant, then add 2 to the number.

(iv) It there is single vowel, then vowel changes to previous letter in English alphabetical series.

Step–III: has been derived using a special pattern.

Input:

K 3	U5	L 1
MI 6		C 3
TA 4	CK 2	F 6

16. **What is the sum of all numbers in step II of given input?**
    (a) 42   (b) 40   (c) 33   (d) 36
    (e) 38

17. **In last step, which of the following letter/s occur more than 2 times?**
    (a) D   (b) A   (c) J
    (d) Both J and D   (e) None

18. **Which of the following represents the second element in 3rd row in step III?**
    (a) T2   (b) R2   (c) DJ4   (d) S2
    (e) CK5

19. **In step III, how many letters are there which represent number less than 13 according to English alphabetical series? (A = 1, B = 2, ….., Z = 26)**
    (a) 3   (b) 5   (c) 6   (d) 1
    (e) 4

20. **From step II to III, numbers in how many boxes change?**
    (a) 3   (b) 5   (c) 2   (d) 1
    (e) 4

9 Advanced Number Series

Direction : In the given question a number series is given. In the series only one number is wrong. Identify the wrong number?

1. **3, 4.5, 8.5, 20, 53, 162.5**
   (a) 3   (b) 4.5   (c) 8.5   (d) 20
   (e) 53

2. **144, 215, 540, 1890, 8505, 46777.5, 304053.75**
   (a) 215   (b) 540   (c) 1890   (d) 8505
   (e) 46777.5

3. **2222, 1879, 1663, 1538, 1474, 1447, 1440**
   (a) 1879   (b) 1538   (c) 1474   (d) 1447
   (e) 1440

4. **6, 91, 584, 2935, 11756, 35277, 70558**
   (a) 6   (b) 70558   (c) 584   (d) 2935
   (e) 35277

5. **9050, 5675, 3478, 2147, 1418, 1077, 950**
   (a) 950   (b) 1418   (c) 5675   (d) 2147
   (e) 1077

Direction : What will come at the place of question mark (?) in the following number series?

6. **119, 481, 1084, 1929, ?**
   (a) 2371   (b) 3498   (c) 2628   (d) 3014
   (e) 3625

7. **9, 31, 73, 141, ?**
   (a) 164   (b) 280   (c) 239   (d) 241
   (e) None of these

8. **What would come in place of the question mark in the given number series? 64, 96, 240, 840, 3780, ?**
   (a) 32090   (b) 10840   (c) 20790   (d) 12680
   (e) None of these

9. **In the following series, what would come in place of question mark?**
   31, 247, 1727, 10359, ?
   (a) 15334   (b) 28561   (c) 42632   (d) 66328
   (e) 51791

10. **What will come in place of question mark (?) in the following number series?**
    17, 9, 10, ?, 35, 90
    (a) 16.5   (b) 19   (c) 18.5   (d) 22.5
    (e) 21.5

11. **What will come in place of the question mark in the following number series?**
    673, 470, ?, 196, 113
    (a) 369   (b) 244   (c) 221   (d) 313
    (e) 291

12. **What will come in place of the question mark (?) in the following number series.**

13. **19, 99, 171, 18, ?**
    (a) 99   (b) 19   (c) 81   (d) 90
    (e) 79

13. **180, 15, 165, 16.5, 148.5, ?**
    (a) 14.8510   (b) 16.4325   (c) 18.5625   (d) 24.50
    (e) 73.75

14. **38, 49, 62, 70, 77, ?**
    (a) 101   (b) 81   (c) 84   (d) 91
    (e) 94

15. **75, 90, 108, ?, 155.52, 186.624**
    (a) 122.4   (b) 129.6   (c) 136.6   (d) 144
    (e) 132.4

16. **In the given question a number series is given. In the series only one number is wrong. Identify the wrong number?**
    6, 26, 51, 86, 317
    (a) 86   (b) 317   (c) 51   (d) 6
    (e) 26

17. **In the following number series only one number is wrong. Find out the wrong number.**
    12.8, 41.6, 86.4, 147.4, 224, 316.8
    (a) 41.6   (b) 147.4   (c) 224   (d) 316.8
    (e) 86.4

18. **Find the wrong number in the following number series?**
    263, 284, 331, 362, 373, 482
    (a) 331   (b) 373   (c) 482   (d) 284
    (e) 263

19. **Find the wrong number in the following number series?**
    5, 8, 20, 95, 650, 7140, 92808
    (a) 95   (b) 8   (c) 20   (d) 92808
    (e) 7410

20. **Which of the following is the wrong term in the following number series?**
    11, 24, 16, 38, 27, 64, 48
    (a) 48   (b) 27   (c) 38   (d) 64
    (e) 24

21. **In the following question the numbers form a series and there is one missing term, you have to insert the missing term :**
    228, 240, 276, 426, 818, 2270, ...
    (a) 4146   (b) 4240   (c) 4545   (d) 4636
    (e) None of these

22. **In the following question the numbers form a series and there is one missing term, you have to insert the missing term :**

12783, 12745, 12691, 12672, 12645, 12591, ………
(a) 12545   (b) 12573   (c) 12522   (d) 12539
(e) None of these

23. **What would come in place of the question mark (?) in the following series?**
872, 200, 536, 368, 452, ?
(a) 494   (b) 478   (c) 436   (d) 412
(e) None of these

24. **What would come in place of the question mark (?) in the following number series?**
745, 745, 731, 703, 661, ?
(a) 605   (b) 595   (c) 585   (d) 575
(e) 545

25. **What would come in place of the question mark (?) in the following question?**
3, 8, 23, 78, ?
(a) 323   (b) 314   (c) 305   (d) 318
(e) 237

26. **Find the wrong term in the series :**
12, 35, 124, 361, 722, 721
(a) 722   (b) 35   (c) 361   (d) 124
(e) 721

27. **Find the wrong term in the following number series?**
38, 50, 65, 82, 96, 108
(a) 38   (b) 50   (c) 82   (d) 96
(e) 108

28. **In the given question a number series is given. In the series only one number is wrong. Identify the wrong number?**
77, 221, 437, 841, 1517, 2021
(a) 1517   (b) 221   (c) 841   (d) 77
(e) None of these

29. **In the given question a number series is given. In the series only one number is wrong. Identify the wrong number?**
1, 9, 32, 114, 478, 2400
(a) 32   (b) 9   (c) 114   (d) 2400
(e) 478

30. **In the given question a number series is given. In the series only one number is wrong. Identify the wrong number?**
15, 28, 45, 66, 91, 125
(a) 45   (b) 66   (c) 125   (d) 91
(e) 28

31. **In the following question the numbers form a series and there is one missing term at the end of the sequance, you have to insert the missing term :**
60, 291, 485, 642, 762, ……
(a) 875   (b) 855   (c) 858   (d) 830
(e) 845

Direction : What will come at the place of question mark (?) in the following number series?

32. **12, 20, 51, 230, ?, 17050**
(a) 1270   (b) 1380   (c) 1641   (d) 1561

(e) 1080

33. **382, 357, 308, ?, 106**
(a) 227   (b) 224   (c) 250   (d) 81
(e) 121

34. **663, 627, 555, ?, 303, 123**
(a) 546   (b) 447   (c) 312   (d) 445
(e) 396

Direction : In the given question the numbers form a series and there is/are one or more missing term(s) at the end of the sequence, you have to insert the missing term (s) :

35. **15, 35, 63, 99, 143, ……**
(a) 192   (b) 195   (c) 190   (d) 185
(e) None of these

Direction : In the given question a number series is given. In the series only one number is wrong. Identify the wrong number?

36. **2, 3, 11, 48, 102, 227**
(a) 3   (b) 11   (c) 48   (d) 102
(e) 227

37. **6, 14, 30, 64, 126, 254**
(a) 126   (b) 64   (c) 30   (d) 14
(e) 6

38. **Find out the wrong number in the series.**
445, 221, 109, 46, 25, 11, 4
(a) 221   (b) 109   (c) 46   (d) 25
(e) 11

Direction : In the following question only one number is wrong. Find out the wrong number.

39. **6, 14, 60, 366, 2946, 29370**
(a) 14   (b) 29370   (c) 366   (d) 60
(e) 2946

40. **21, 70, 288, 1459, 8704, 60939**
(a) 1459   (b) 21   (c) 288   (d) 8704
(e) 60939

Direction : What will come in place of the question mark (?) in the given number series?

41. **130, 139, 155, 180, 216, ?**
(a) 260   (b) 290   (c) 265   (d) 296
(e) None of these

42. **2890, ?, 1162, 874, 730, 658**
(a) 1684   (b) 1738   (c) 1784   (d) 1672
(e) None of these

43. **3 4 16 75 364 ?**
(a) 783   (b) 828   (c) 1293   (d) 1945
(e) None of these

44. **Find the missing number in the given number series**
8, 58, 409, 2867, 20074, ?
(a) 28975   (b) 140524   (c) 188276   (d) 285671
(e) 369314

45. **What will come in the place of question mark (?) in the given number series?**
24, 27, 59, 184, ?
(a) 232   (b) 191   (c) 568   (d) 637
(e) 745

Direction : Study the following information carefully and answer the questions given below.

There are eight people P, Q, R, S, T, U, V and W are sitting along two concentric Squares. All the persons are exactly sitting at the middle of the edges. Those who are sitting in the outer Square are facing the center and those who are sitting in the inner Square are facing away from the center. There are four females and four males and all are married people. Married couples are facing each other. (If A is married to B then both are sitting in different circle and they face each other).

The one who sits to the immediate right of R is not female person. W and P are married to each other. T and P are not sitting in the inner Square. The immediate neighbor of W is not a male. S is not a female person. Among V and P one of them is male. Q is not an immediate neighbor of R and doesn't sit in inner Square. R is married to U who is sitting in the inner circle.

1. **S is married to _____?**
   (a) The one who sits immediate left of V
   (b) The one who sits is second to the left of W
   (c) The one who sits immediate right of R
   (d) The one who sits immediate left of R
   (e) None of those given as option

2. **Four of the five among the following are similar in such a way to form a group, Which one of the following doesn't belong to group?**
   (a) P, Q   (b) T, R   (c) U, S   (d) V, W
   (e) R, Q

3. **Who sits Immediate right of R's Spouse?**
   (a) S   (b) P   (c) W   (d) V
   (e) None of those given as option

Direction : Study the following information carefully and answer the questions given below.

Eight persons A, B, C, D, E, F, G and H are sitting around a circular table facing towards the center.

1. P @ Q means P sits Second to the left of Q
2. P # Q means P and Q sitting opposite to each other
3. P $ Q means P is an immediate neighbour of Q
4. P % Q means P sits third to the left of Q
5. P & Q means P sits third to the right of Q
6. P ^ Q means P is not an immediate neighbour of Q.

Given Statements:
H&E$G, B#E, C@G, D#F, E^C^F

4. **Which one of the following is correct?**
   (a) H % D   (b) A $ D   (c) D # B   (d) G $ F
   (e) Both (a) and (d)

Direction: Study the following information carefully and answer the questions.

A & B →A is 15 m to the north of B
A @ B →A is 23 m to the east of B
A # B →A is 20 m to the south of B
A % B →A is 12 m to the west of B
If P % Q # R & S @ T # U,

5. **If Point X is 5m to the south of T, then what is the distance between Point X and Point P?**
   (a) 15m   (b) 23m   (c) 11m   (d) 6m
   (e) None of those given as option

Direction (6-7) : Study the following information carefully and answer the questions Clubs (♣), diamonds (♦), hearts (♥) and spades (♠)

A ♥ B means A is to the North of B
A ♣ B means A is to the South of B
A ♠ B means A is to the East of B
A ♦ B means A is to the West of B
There are 3 buses travelling from Z to Y.
Bus 1: K 16 ♦ Z, J 10 ♣ K, M 9 ♦ J, D 18 ♥ M, C 29 ♠ D, P 9 ♥ C, Y 4 ♦ P
Bus 2 : E 35 ♣ Z, F 6 ♦ E, G 13 ♥ F, H 19 ♦ G, L 39 ♥ H, Y 25 ♠ L
Bus 3 : N 32 ♠ Z, Q 4 ♥ N, S 8 ♦ Q, T 4 ♥ S, C 20 ♦ T, U 4 ♦ C, U 4 ♣ V, Y 5 ♥ V

6. **What is the distance between D & T?**
   (a) 39m   (b) 49m   (c) 50m   (d) 25m
   (e) None of those given as option

7. **What is the distance and direction of E with respect to V?**
   (a) 47m, South   (b) 37m, South
   (c) 25m, North   (d) 45m, East
   (e) None of those given as option

Direction: Study the following information carefully and answer the questions.

The following words are coded in this manner:

'Words make sentences meaningful' as	'8$A, 2!R, 6#C, 14$F'
'Rain stops every week' as	'2^E, 2#O, 8+A, 8!E'
'Eagerly receives ___(a)___ as	'6%R, 4^R, 12+V'
'Rarely prepares tasty food' as	'12%R, 2~S, __(b)__, 8@O'

8. **What will come in the blank '(a)"?**
   (a) Prepares   (b) Rarely   (c) Tasty   (d) Food
   (e) Eagerly

9. **What will come in the blank '(b)"?**
   (a) 5 $ F   (b) 8 * D   (c) 10 + E   (d) 7 # D
   (e) 9 ^ Y

Directions (10-14) : Study the following information carefully and answer the questions below.

Nine bankers namely - B, D, F, H, P, R, V, W and Z are sitting in a triangular dinner table in such a way that two persons sit at each edge facing center and one person at the corner facing away from the center. Each person likes different numbers which is either a square or cube number between 1 to 100. None of the adjacent person likes consecutive numbers (For Example:- If A sits exactly between C and B, A likes 16, then none of the B and C likes 9 and 25). Each person also works in different banks viz. PNB, CBI, SBI, BOB, HDFC, ICICI, UCO, UBI and BOI. All the information is not necessarily in the same order.

The one who likes 36 sits second to right of the one who works in BOI, who doesn't like cube number. The one who likes PNB sits four places away from B, who likes 4 but doesn't work in BOI. F neither sits adjacent to the one who likes 4 nor sits adjacent to V. The one who likes 64 sits third to the right of the one who works in SBI, who doesn't sit adjacent to the one who works in BOB. None of the person likes 81. The one who works in CBI sits immediate right of D and is three places away from the one who works in BOB. V sits three places left of the one who likes 9, who sits immediate right of the one who works in PNB. V does not like a square number but sits facing center. The one who works in HDFC and the one who works in PNB doesn't sits together. The one who likes 27 sits third to the left of F, who works in HDFC. Three person sits between the one who works in UBI and the one who likes 49. The one who works in BOI sits four places away from W, who neither likes 9 nor sits adjacent to V. The one who works in BOB sits immediate left of R, who doesn't like 27. Three persons sit between the one who likes 8 and Z, who sits adjacent to the one who likes 25. The difference between the one who likes UBI and P is itself a square number. P neither likes 16 nor 25. The one who likes 16 and ICICI sit together.

10. In which of the following combination 1st element doesn't sits exactly between 2nd and 3rd element?
(a) CBI - D - HDFC   (b) UCO - Z - 4
(c) R - ICICI - BOB   (d) 27 - SBI - H
(e) None of these

11. Which of the following statement is true?
(a) The one who works in PNB sits immediate right of the one who likes 16.
(b) Three persons sit between the one who works in UCO and the one who works in ICICI.
(c) The one who works in HDFC sits immediate right of the one who likes 64.
(d) The one who works in SBI sits second to the right of the one who likes 25.
(e) All the give statements are not true.

12. Who among the following person sits immediate right of the one who likes 8?
(a) H   (b) Z   (c) B   (d) R
(e) None of these

13. Who among the following person likes 25?
(a) Z   (b) F   (c) H   (d) R
(e) None of these

14. What is the position of the one who works in UCO with respect to Z?
(a) Second to left   (b) Third to left
(c) Sixth to right   (d) Immediate right
(e) None of these

Directions (15-19): Study the following information carefully and answer the below questions.

Eight person are sitting in a circular table facing center. Age of each person is different. Also each person works in different bank. The one who works in PNB sits second to left of Mike, who works in BOB. Age of the one who works in PNB is not 36 years. Maya neither sits adjacent to the one whose age is 31 years nor sits adjacent to the one who works in PNB. Age of Sam is neither 56 years nor works in UBI. The one who works in UBI sits immediate right of the one who works in ICICI, whose age is___(26)___. Age of the one who works in BOB is 31 years and sits at a gap of two person from the one who works in UBI. One person sits between Tom and the one who works in ICICI. Age of the one who works in PNB is___(27)___years. Age of Tom is neither 48 years nor works in HDFC. Age of Jay is 42 years and sits adjacent to the one who works in CBI. Maya works in___(28)___and sits second to right of the one who works in HDFC. The one who works in SBI sits immediate right of Priya, who neither works in HDFC nor her age is 42 years. Age of ___(29)___is 39 years and sits second to left of the one who works in SBI. The one who works in CBI sits third to left of Rinku. ___(30)___works in SBI and sits at a gap of two person from the one whose age is 36 years. The one who works in BOM and the one who whose age is 48 years sits together. One person sits between the one whose age is 23 years and Ajeet, whose age is 48 years. Age of the one the one who works in BOM is twice the age of the one who works in SBI.

15. Which of the following will replace ...(26)...?
(a) 36   (b) 48   (c) 23   (d) 56
(e) None of these

16. Which of the following will replace ...(27)...?
(a) 28   (b) 56   (c) 42   (d) 39
(e) None of these

17. Which of the following will replace ...(28)...?
(a) BOM   (b) SBI   (c) UBI   (d) CBI
(e) None of these

18. Which of the following will replace ...(29)...?
(a) Ajeet   (b) Rinku   (c) Sam   (d) Tom
(e) None of these

19. Which of the following will replace
(a) Rinku   (b) Jay   (c) Sam   (d) Maya
(e) None of these

Directions: Study the following information carefully and answer the questions given below:

In a certain code language

'Joyce jumping claim funding' is written as '~2o @26g A5i @17i'

'further brandon crown black' is written as '$2m ~16p $15p A21t'

'fighter fresh faces jokes' is written as '@12u Mu A9t A6j'

'bride broad belgium judge' is written as '$10g @5g $16f $8o'

20. **"^15f" is the code for which of the following word(s)?**
    (a) jamie   (b) founded   (c) jeans   (d) florist
    (e) justice

21. **"~19g" is the code for which of the following word(s)?**
    (a) florist   (b) jamie   (c) jeans   (d) charlie
    (e) justice

22. **Find the code for "biggest"**
    (a) $8w   (b) ~9v   (c) $8v   (d) ~8w
    (e) $9w

23. **Find the code for "central".**
    (a) $21o   (b) $22n   (c) ~21o   (d) ~21n
    (e) ~22o

24. **Find the code for "jessica chess".**
    (a) ~21c ~6u   (b) $7u ~ 21c
    (c) @20c $7u   (d) ~6u @20c
    (e) @20d ~6v

Direction (25-28): In each of the questions below are given some statements followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.
(e) If both conclusions I and II follow.

25. **Statements:**
    Only a few Chart are Turbine
    Only a few Turbine are Pores
    Only a few Pores are fan
    Conclusions:
    I. Some fan is chart is a possibility
    II. All fan are Turbine

26. **Statements:**
    All Beaches are Deltas
    All Deltas are cushions
    No Cushions is wave
    Conclusions:
    I. Some Beaches can be wave
    II. No Deltas is Wave

27. **Statements: Only a few Aces are Club**
    No club is Jack
    Only a few Jack are Diamond
    Conclusions:
    I. Some Diamond are Aces
    II. Some Aces are Jack

28. **Statements:**
    Some Apple are Banana.
    No Banana is Date
    Conclusions:
    I. Some Date are not Apple is a possibility
    II. All Apple can never be Date

Directions (29-33): Study the information carefully and answer the question given below.

There are ten persons J, P, Q, R, S, T, G, U, V and X living in a ten-floor building, such that ground floor is numbered as 1, just above the floor is numbered as 2 and so on the topmost floor is numbered as 10, but not necessary in the same order. P lives on the 5th floor. Only three persons live between P and V. T lives immediate above J, who lives on an odd numbered floor. S lives on one of the floors below R. Number of persons lives between J and P is same as number of persons lives between T and R. There is only one floor in between U and X. W lives on an odd numbered floor. R does not live on top floor. S lives on an odd numbered floor above X but not on seventh floor. V lives below the floor on which P lives. U lives above the floor on which X lives. Q lives on an even numbered floor above P but not on top floor.

29. **How many persons live between W and S?**
    (a) One   (b) Four   (c) None   (d) Three
    (e) More than four

30. **Who among the following Lives on topmost floor?**
    (a) V   (b) W   (c) T   (d) S
    (e) U

31. **Four of the following five are alike in certain way based from a group, find the one which does not belong to that group?**
    (a) Q   (b) X   (c) U   (d) W
    (e) T

32. **Who among the following lives immediate above Q?**
    (a) J   (b) W   (c) P   (d) S
    (e) V

33. **Which of the following statement is not true about U?**
    (a) U lives on 4th floor
    (b) Two persons live between U and W
    (c) V lives immediate below U
    (d) P lives immediate above U
    (e) All are true

ANSWER KEY OF ADVANCED REASONING

> ALPHA NUMERIC ANSWER KEY

1. (b)	**2.** (c)	**3.** (e)	**4.** (b)	**5.** (b)	**6.** (c)	**7.** (b)	**8.** (e)	**9.** (a)	**10.** (d)
11. (c)	**12.** (d)	**13.** (a)	**14.** (e)	**15.** (b)	**16.** (c)	**17.** (a)	**18.** (b)	**19.** (d)	**20.** (e)
21. (a)	**22.** (b)	**23.** (e)	**24.** (d)	**25.** (c)					

> CODING DECODING ANSWER KEY 1

1. (a)	**2.** (e)	**3.** (c)	**4.** (d)	**5.** (b)	**6.** (b)	**7.** (d)	**8.** (e)	**9.** (c)	**10.** (c)
11. (e)	**12.** (a)	**13.** (e)	**14.** (e)	**15.** (b)	**16.** (c)	**17.** (a)	**18.** (e)	**19.** (d)	**20.** (a)
21. (e)	**22.** (c)	**23.** (b)	**24.** (b)	**25.** (c)	**26.** (b)	**27.** (b)	**28.** (d)	**29.** (b)	**30.** (d)
31. (b)	**32.** (c)	**33.** (a)	**34.** (d)	**35.** (c)	**36.** (b)	**37.** (a)	**38.** (b)	**39.** (a)	**40.** (c)
41. (e)	**42.** (e)	**43.** (d)	**44.** (e)	**45.** (e)	**46.** (c)	**47.** (b)	**48.** (b)	**49.** (a)	**50.** (d)
51. (d)	**52.** (d)	**53.** (b)	**54.** (a)	**55.** (d)	**56.** (c)	**57.** (d)	**58.** (d)	**59.** (c)	**60.** (e)
61. (b)	**62.** (c)	**63.** (c)	**64.** (d)	**65.** (b)	**66.** (c)	**67.** (e)	**68.** (d)	**69.** (c)	**70.** (b)
71. (d)	**72.** (e)	**73.** (a)	**74.** (b)	**75.** (e)	**76.** (b)	**77.** (d)	**78.** (b)	**79.** (a)	**80.** (b)
81. (e)									

> ANSWER KEY 2

1. (a)	**2.** (c)	**3.** (c)	**4.** (b)	**5.** (d)	**6.** (c)	**7.** (b)	**8.** (b)	**9.** (d)	**10.** (c)
11. (b)	**12.** (d)	**13.** (d)	**14.** (b)	**15.** (b)	**16.** (a)	**17.** (c)	**18.** (d)	**19.** (c)	**20.** (b)
21. (d)	**22.** (c)	**23.** (a)	**24.** (e)	**25.** (a)	**26.** (c)	**27.** (d)	**28.** (a)	**29.** (e)	**30.** (d)
31. (c)	**32.** (c)	**33.** (c)	**34.** (c)	**35.** (b)					

> ANSWER KEY 3

1. (c)	**2.** (d)	**3.** (b)	**4.** (e)	**5.** (d)	**6.** (c)	**7.** (e)	**8.** (c)	**9.** (e)	**10.** (b)
11. (d)	**12.** (d)	**13.** (e)	**14.** (d)	**15.** (b)	**16.** (c)	**17.** (a)	**18.** (c)	**19.** (e)	**20.** (e)
21. (c)	**22.** (d)								

> ANSWER KEY 4

1. (b)	**2.** (a)	**3.** (a)	**4.** (a)	**5.** (c)	**6.** (e)	**7.** (c)	**8.** (d)	**9.** (b)	**10.** (b)
11. (d)	**12.** (d)	**13.** (d)	**14.** (c)	**15.** (b)	**16.** (b)	**17.** (a)	**18.** (c)	**19.** (e)	**20.** (d)
21. (e)									

> CODED INEQUALITY ANSWER KEY 1

1. (d)	**2.** (c)	**3.** (a)	**4.** (e)	**5.** (b)	**6.** (c)	**7.** (c)	**8.** (b)	**9.** (d)	**10.** (e)
11. (a)	**12.** (c)	**13.** (b)	**14.** (e)	**15.** (d)	**16.** (c)	**17.** (d)	**18.** (a)	**19.** (b)	**20.** (e)
21. (d)	**22.** (b)	**23.** (a)	**24.** (d)	**25.** (e)	**26.** (e)	**27.** (b)	**28.** (d)	**29.** (a)	**30.** (a)
31. (b)	**32.** (b)	**33.** (d)	**34.** (e)	**35.** (e)	**36.** (a)	**37.** (d)	**38.** (a)	**39.** (e)	**40.** (b)

> ANSWER KEY 2

1. (d)	**2.** (c)	**3.** (e)	**4.** (c)	**5.** (d)	**6.** (e)	**7.** (a)	**8.** (a)	**9.** (b)	**10.** (a)
11. (d)	**12.** (a)	**13.** (c)	**14.** (d)	**15.** (b)	**16.** (d)	**17.** (d)	**18.** (b)	**19.** (e)	**20.** (c)
21. (c)	**22.** (d)	**23.** (b)	**24.** (c)	**25.** (b)	**26.** (d)	**27.** (e)	**28.** (d)	**29.** (c)	**30.** (c)
31. (d)	**32.** (c)	**33.** (d)	**34.** (d)						

> PRACTICE SET

1. (c)	**2.** (d)	**3.** (e)	**4.** (a)	**5.** (a)	**6.** (b)	**7.** (d)	**8.** (e)	**9.** (b)	**10.** (a)
11. (c)	**12.** (b)	**13.** (a)	**14.** (c)	**15.** (c)	**16.** (d)	**17.** (d)	**18.** (a)	**19.** (d)	**20.** (e)
21. (a)	**22.** (a)	**23.** (b)	**24.** (b)	**25.** (d)	**26.** (a)	**27.** (e)	**28.** (d)	**29.** (e)	**30.** (a)
31. (c)	**32.** (a)	**33.** (d)	**34.** (e)	**35.** (b)					

> SYLLOGISM I

1. (c)	**2.** (a)	**3.** (e)	**4.** (b)	**5.** (d)	**6.** (e)	**7.** (e)	**8.** (a)	**9.** (c)	**10.** (a)
11. (b)	**12.** (e)	**13.** (d)	**14.** (a)	**15.** (e)	**16.** (e)	**17.** (b)	**18.** (d)	**19.** (a)	**20.** (e)
21. (c)	**22.** (a)	**23.** (e)	**24.** (d)	**25.** (e)	**26.** (b)	**27.** (e)	**28.** (b)	**29.** (d)	**30.** (e)

> ANSWER KEY 2

1. (b)	**2.** (c)	**3.** (d)	**4.** (a)	**5.** (e)	**6.** (b)	**7.** (d)	**8.** (b)	**9.** (b)	**10.** (d)
11. (d)	**12.** (b)	**13.** (a)	**14.** (d)	**15.** (b)	**16.** (d)	**17.** (e)	**18.** (a)	**19.** (a)	**20.** (c)
21. (b)	**22.** (d)	**23.** (b)	**24.** (a)	**25.** (b)	**26.** (e)	**27.** (c)	**28.** (b)	**29.** (c)	**30.** (a)
31. (b)	**32.** (e)	**33.** (c)	**34.** (e)						

> ANSWER KEY 3

1. (c)	**2.** (b)	**3.** (b)	**4.** (d)	**5.** (b)	**6.** (d)	**7.** (c)	**8.** (b)	**9.** (c)	**10.** (c)
11. (b)	**12.** (e)	**13.** (c)	**14.** (e)	**15.** (b)	**16.** (d)	**17.** (c)	**18.** (b)	**19.** (c)	**20.** (d)
21. (c)	**22.** (e)	**23.** (c)	**24.** (a)	**25.** (c)	**26.** (d)	**27.** (b)	**28.** (c)	**29.** (b)	

> PRACTICE SET

1. (c)	**2.** (b)	**3.** (d)	**4.** (b)	**5.** (c)	**6.** (d)	**7.** (b)	**8.** (b)	**9.** (e)	**10.** (e)
11. (e)	**12.** (a)	**13.** (c)	**14.** (e)	**15.** (e)	**16.** (d)	**17.** (c)	**18.** (b)	**19.** (c)	**20.** (d)
21. (c)	**22.** (e)	**23.** (b)	**24.** (a)	**25.** (c)					

> BLOOD RELATION

1. (a)	**2.** (b)	**3.** (d)	**4.** (d)	**5.** (b)	**6.** (c)	**7.** (d)	**8.** (c)	**9.** (e)	**10.** (e)
11. (b)	**12.** (b)	**13.** (d)	**14.** (e)	**15.** (d)	**16.** (b)	**17.** (d)	**18.** (e)	**19.** (d)	**20.** (c)
21. (a)	**22.** (c)	**23.** (a)	**24.** (d)	**25.** (b)	**26.** (c)	**27.** (a)			

> PRACTICE SET

1. (d)	**2.** (d)	**3.** (c)	**4.** (b)	**5.** (b)	**6.** (a)	**7.** (b)	**8.** (d)	**9.** (a)	**10.** (d)
11. (a)	**12.** (c)	**13.** (a)	**14.** (d)	**15.** (b)	**16.** (d)	**17.** (e)	**18.** (c)	**19.** (a)	**20.** (d)
21. (d)	**22.** (a)	**23.** (e)	**24.** (c)						

> INPUT OUTPUT ANSWER KEY

1. (d)	**2.** (c)	**3.** (e)	**4.** (d)	**5.** (d)	**6.** (b)	**7.** (e)	**8.** (c)	**9.** (a)	**10.** (d)
11. (e)	**12.** (d)	**13.** (b)	**14.** (e)	**15.** (c)	**16.** (e)	**17.** (d)	**18.** (d)	**19.** (c)	**20.** (c)
21. (d)	**22.** (d)	**23.** (a)	**24.** (a)	**25.** (a)	**26.** (b)	**27.** (d)	**28.** (c)	**29.** (b)	**30.** (e)
31. (d)	**32.** (b)	**33.** (e)	**34.** (a)	**35.** (b)	**36.** (e)	**37.** (c)	**38.** (d)	**39.** (c)	**40.** (d)
41. (c)	**42.** (c)	**43.** (c)	**44.** (e)	**45.** (b)	**46.** (d)	**47.** (c)	**48.** (a)	**49.** (d)	**50.** (e)
51. (e)	**52.** (d)								

> ANSWER KEY 2

1. (a)	**2.** (b)	**3.** (c)	**4.** (a)	**5.** (d)	**6.** (b)	**7.** (c)	**8.** (d)	**9.** (e)	**10.** (d)
11. (c)	**12.** (c)	**13.** (e)	**14.** (a)	**15.** (e)	**16.** (e)	**17.** (d)	**18.** (a)	**19.** (a)	**20.** (d)
21. (d)	**22.** (d)	**23.** (c)	**24.** (a)	**25.** (d)	**26.** (a)	**27.** (c)	**28.** (e)	**29.** (d)	**30.** (b)
31. (c)	**32.** (b)	**33.** (e)	**34.** (a)	**35.** (d)	**36.** (b)	**37.** (c)	**38.** (d)	**39.** (b)	**40.** (d)

> PRACTICE SET

1. (d)	**2.** (c)	**3.** (d)	**4.** (e)	**5.** (d)	**6.** (d)	**7.** (c)	**8.** (b)	**9.** (e)	**10.** (a)
11. (a)	**12.** (e)	**13.** (b)	**14.** (a)	**15.** (d)	**16.** (e)	**17.** (c)	**18.** (b)	**19.** (c)	**20.** (a)

> SITTING ARRANGEMENT LOD 1

1. (d)	**2.** (c)	**3.** (e)	**4.** (a)	**5.** (b)	**6.** (b)	**7.** (e)	**8.** (d)	**9.** (b)	**10.** (d)
11. (b)	**12.** (d)	**13.** (c)	**14.** (d)	**15.** (b)	**16.** (d)	**17.** (a)	**18.** (d)	**19.** (e)	**20.** (e)
21. (b)	**22.** (b)	**23.** (b)	**24.** (b)	**25.** (d)	**26.** (c)	**27.** (a)	**28.** (d)	**29.** (b)	**30.** (c)
31. (c)	**32.** (e)	**33.** (b)	**34.** (a)	**35.** (e)	**36.** (c)	**37.** (b)	**38.** (e)	**39.** (e)	**40.** (d)
41. (c)	**42.** (b)	**43.** (c)	**44.** (d)	**45.** (b)	**46.** (b)	**47.** (d)	**48.** (a)	**49.** (e)	**50.** (b)
51. (a)	**52.** (e)	**53.** (c)	**54.** (e)	**55.** (a)	**56.** (a)	**57.** (d)	**58.** (c)	**59.** (a)	**60.** (b)
61. (d)	**62.** (b)	**63.** (a)	**64.** (c)	**65.** (b)	**66.** (c)	**67.** (a)	**68.** (d)	**69.** (d)	**70.** (b)
71. (a)	**72.** (d)	**73.** (d)	**74.** (a)	**75.** (d)	**76.** (e)	**77.** (d)	**78.** (c)	**79.** (a)	**80.** (d)
81. (d)	**82.** (a)	**83.** (b)	**84.** (b)	**85.** (e)	**86.** (a)	**87.** (c)	**88.** (d)	**89.** (c)	**90.** (c)
91. (a)	**92.** (d)	**93.** (b)							

> SITTING ARRANGEMENT LOD 2

1. (a)	**2.** (c)	**3.** (c)	**4.** (c)	**5.** (b)	**6.** (b)	**7.** (c)	**8.** (b)	**9.** (a)	**10.** (d)
11. (d)	**12.** (c)	**13.** (e)	**14.** (b)	**15.** (c)	**16.** (d)	**17.** (e)	**18.** (a)	**19.** (d)	**20.** (b)
21. (c)	**22.** (d)	**23.** (e)	**24.** (c)	**25.** (e)	**26.** (e)	**27.** (c)	**28.** (d)	**29.** (c)	**30.** (c)
31. (d)	**32.** (a)	**33.** (b)	**34.** (c)	**35.** (d)	**36.** (a)	**37.** (e)	**38.** (c)	**39.** (a)	**40.** (b)
41. (e)	**42.** (d)	**43.** (c)	**44.** (e)	**45.** (d)	**46.** (d)	**47.** (b)	**48.** (c)	**49.** (c)	**50.** (d)
51. (a)	**52.** (e)	**53.** (b)	**54.** (c)	**55.** (d)	**56.** (a)	**57.** (e)	**58.** (b)		

> SITTING ARRANGEMENT PRACTICE SET

1. (c)	**2.** (b)	**3.** (c)	**4.** (b)	**5.** (b)	**6.** (b)	**7.** (c)	**8.** (a)	**9.** (d)	**10.** (d)
11. (a)	**12.** (c)	**13.** (b)	**14.** (d)	**15.** (e)	**16.** (e)	**17.** (a)	**18.** (e)	**19.** (b)	**20.** (a)
21. (b)	**22.** (d)	**23.** (d)	**24.** (c)	**25.** (e)	**26.** (c)	**27.** (b)	**28.** (c)	**29.** (d)	**30.** (c)
31. (e)	**32.** (d)	**33.** (b)	**34.** (d)	**35.** (e)					

> PUZZLE LOD 1

1. (a)	**2.** (d)	**3.** (c)	**4.** (d)	**5.** (e)	**6.** (d)	**7.** (b)	**8.** (a)	**9.** (e)	**10.** (a)
11. (c)	**12.** (b)	**13.** (e)	**14.** (a)	**15.** (d)	**16.** (a)	**17.** (e)	**18.** (d)	**19.** (d)	**20.** (e)
21. (b)	**22.** (c)	**23.** (a)	**24.** (d)	**25.** (e)	**26.** (c)	**27.** (a)	**28.** (a)	**29.** (c)	**30.** (b)
31. (e)	**32.** (d)	**33.** (b)	**34.** (d)	**35.** (a)	**36.** (b)	**37.** (c)	**38.** (b)	**39.** (e)	**40.** (a)
41. (d)	**42.** (a)	**43.** (d)	**44.** (d)	**45.** (e)	**46.** (c)	**47.** (a)	**48.** (c)	**49.** (c)	**50.** (b)
51. (c)	**52.** (b)	**53.** (d)	**54.** (d)	**55.** (b)					

> PUZZLE LOD 2

1. (c)	**2.** (b)	**3.** (d)	**4.** (d)	**5.** (c)	**6.** (b)	**7.** (b)	**8.** (d)	**9.** (c)	**10.** (d)
11. (e)	**12.** (b)	**13.** (a)	**14.** (d)	**15.** (c)	**16.** (a)	**17.** (d)	**18.** (d)	**19.** (d)	**20.** (c)
21. (e)	**22.** (e)	**23.** (c)	**24.** (e)	**25.** (d)	**26.** (a)	**27.** (b)	**28.** (d)	**29.** (c)	**30.** (a)
31. (e)	**32.** (d)	**33.** (a)	**34.** (d)	**35.** (e)	**36.** (d)	**37.** (c)	**38.** (d)	**39.** (b)	**40.** (d)

> PUZZLE LOD PRACTICE SET

1. (c)	**2.** (b)	**3.** (e)	**4.** (b)	**5.** (d)	**6.** (d)	**7.** (e)	**8.** (e)	**9.** (b)	**10.** (c)
11. (e)	**12.** (e)	**13.** (c)	**14.** (e)	**15.** (d)	**16.** (a)	**17.** (d)	**18.** (a)	**19.** (c)	**20.** (a)
21. (e)	**22.** (b)	**23.** (c)	**24.** (a)	**25.** (d)	**26.** (e)	**27.** (b)	**28.** (c)	**29.** (d)	**30.** (c)

> ADVANCED NUMBER SEREIS

1. (c)	**2.** (a)	**3.** (e)	**4.** (c)	**5.** (e)	**6.** (d)	**7.** (d)	**8.** (c)	**9.** (e)	**10.** (a)
11. (d)	**12.** (c)	**13.** (c)	**14.** (d)	**15.** (b)	**16.** (a)	**17.** (b)	**18.** (b)	**19.** (a)	**20.** (a)
21. (d)	**22.** (e)	**23.** (e)	**24.** (a)	**25.** (a)	**26.** (c)	**27.** (c)	**28.** (c)	**29.** (c)	**30.** (c)
31. (e)	**32.** (d)	**33.** (a)	**34.** (b)	**35.** (b)	**36.** (c)	**37.** (b)	**38.** (c)	**39.** (e)	**40.** (a)
41. (c)	**42.** (b)	**43.** (d)	**44.** (b)	**45.** (e)					

> MEMORY BASED PAPER ANSWER KEY

1. (d)	**2.** (e)	**3.** (a)	**4.** (a)	**5.** (c)	**6.** (b)	**7.** (a)	**8.** (a)	**9.** (c)	**10.** (b)
11. (e)	**12.** (a)	**13.** (b)	**14.** (a)	**15.** (b)	**16.** (e)	**17.** (a)	**18.** (b)	**19.** (c)	**20.** (b)
21. (d)	**22.** (c)	**23.** (d)	**24.** (d)	**25.** (a)	**26.** (b)	**27.** (d)	**28.** (e)	**29.** (d)	**30.** (c)
31. (d)	**32.** (a)	**33.** (c)							