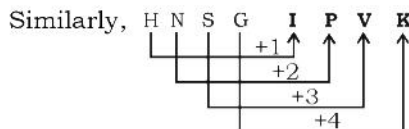
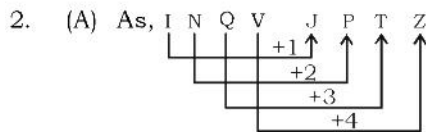


> MOCK-4 Answer key

1. (b)	2. (a)	3. (c)	4. (d)	5. (c)	6. (a)	7. (b)	8. (c)	9. (b)	10. (c)
11. (b)	12. (c)	13. (c)	14. (d)	15. (a)	16. (d)	17. (b)	18. (c)	19. (b)	20. (d)
21. (b)	22. (a)	23. (a)	24. (a)	25. (c)	26. (b)	27. (c)	28. (a)	29. (a)	30. (a)
31. (c)	32. (c)	33. (d)	34. (b)	35. (d)	36. (c)	37. (c)	38. (c)	39. (c)	40. (d)
41. (b)	42. (b)	43. (c)	44. (d)	45. (a)	46. (c)	47. (c)	48. (b)	49. (c)	50. (b)
51. (d)	52. (d)	53. (a)	54. (d)	55. (c)	56. (d)	57. (c)	58. (d)	59. (b)	60. (a)
61. (a)	62. (d)	63. (d)	64. (a)	65. (b)	66. (c)	67. (c)	68. (b)	69. (a)	70. (c)
71. (b)	72. (b)	73. (a)	74. (c)	75. (c)	76. (b)	77. (c)	78. (b)	79. (a)	80. (c)
81. (c)	82. (a)	83. (c)	84. (b)	85. (c)	86. (a)	87. (d)	88. (a)	89. (b)	90. (a)
91. (c)	92. (d)	93. (b)	94. (a)	95. (a)	96. (a)	97. (d)	98. (d)	99. (c)	100. (b)

SOLUTIONS

1. (B) As, the folk-dance of Gujarat is Garba. Similarly, the folk-dance of Punjab is **Bhangra**

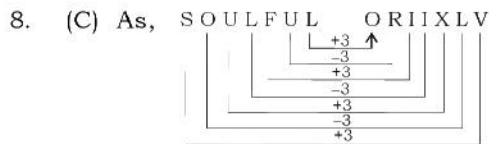


3. (C) As, $108 \times 108 = 11664$
Similarly, $106 \times 106 = \mathbf{11236}$
4. (D) Except **Freezing-Cold**, in others 2nd happens due to 1st.

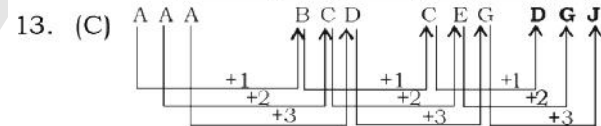
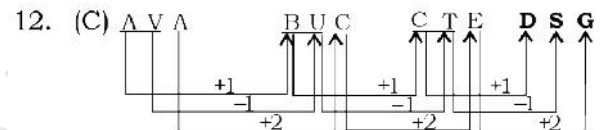
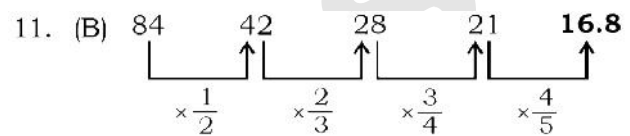
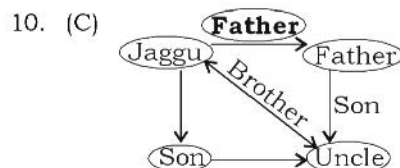


6. (A) $(12)^2 - (12 - 2)^2$
 $(21)^2 - (21 + 1)^2$
 $(5)^2 - (5 + 1)^2$
 $(13)^2 - (13 + 1)^2$

7. (B) **OPTICS**



9. (B) Temple \rightarrow Trainef \rightarrow Trainign \rightarrow Troup \rightarrow Tented



14. (D) 4 8 P 4 R 3 Q 5 6 Q 4
change the symbol as per detail,
 $48 \div 4 + 3 \times 4 - 6 \times 4 = 12 + 12 - 24 = \mathbf{0}$,

15. (A) $(9 + 11) \times 3 = 60$
 $(13 + 17) \times 4 = 120$
 $(40 + 41) \times 5 = \mathbf{405}$

16. (D) $7 + 2 + 4 + 6 = 19$
 $8 + 3 + 2 + 6 = 19$
 $2 + 4 + 7 + \mathbf{6} = 19$

17. (B) $4 \times 3 \times 5 + 10 = 70$
 $11 \times 8 \times 2 + 10 = 186$
 $7 \times 5 \times 3 + 10 = \mathbf{115}$

18. (C) $(7 + 4) \times 8 = \mathbf{88}$
 $(5 + 5) \times 6 = 60$
 $(3 + 1) \times 4 = 16$

19. (B) ATQ,
Required number = $43 + 57 = \mathbf{100}$

20. (D) 21. (B) 22. (A)

23. (A) **I. True II. True**

24. (A) 25. (C)

$$51. (4) \frac{\sqrt{24} + \sqrt{216}}{\sqrt{96}} = \frac{2\sqrt{6} + 6\sqrt{6}}{4\sqrt{6}} = \frac{8\sqrt{6}}{4\sqrt{6}} = 2$$

52. (4) यहाँ पहला भाजक (221) दूसरे भाजक (13) का अपवर्त्य है।
अतः अभीष्ट शेषफल = 64 में 13 से भाग देने पर प्राप्त शेषफल = 12

53. (1) यदि म.स. = H हो तो

$$\text{ल.स.} = 44H$$

$$\therefore 44H + H = 1125$$

$$\Rightarrow 45H = 1125$$

$$\therefore H = \frac{1125}{45} = 25$$

$$\therefore \text{ल.स.} = 44 \times 25 = 1100$$

अब,

$$\text{पहली संख्या} \times \text{दूसरी संख्या} = \text{ल.स.} \times \text{म.स.}$$

$$\Rightarrow 25 \times \text{दूसरी संख्या} = 1100 \times 25$$

$$\therefore \text{दूसरी संख्या} = \frac{1100 \times 25}{25} = 1100$$

$$54. (4) 0.1\% = \frac{0.1}{100} = 0.001$$

55. (3) यदि 1 वस्तु का क्रय मूल्य 1 रुपया हो तो

$$4 \text{ वस्तुओं का क्रय मूल्य} = 4 \text{ रुपए}$$

$$4 \text{ वस्तुओं का विक्रय मूल्य} = 5 \text{ रुपए}$$

$$\therefore \text{लाभ प्रतिशत} = \frac{5-4}{4} \times 100 = 25\%$$

56. (4) अनुक्रम का पैटर्न है :

$$3 + 4 = 7$$

$$7 + 8 = 15$$

$$15 + 16 = 31$$

$$31 + 32 = 63$$

$$63 + 64 = \boxed{127}$$

$$57. (3) \text{ व्यंजक} = \frac{1+\sqrt{2}}{\sqrt{5}+\sqrt{3}} + \frac{1-\sqrt{2}}{\sqrt{5}-\sqrt{3}}$$

$$= \frac{(1+\sqrt{2})(\sqrt{5}-\sqrt{3}) + (\sqrt{5}+\sqrt{3})(1-\sqrt{2})}{(\sqrt{5}+\sqrt{3})(\sqrt{5}-\sqrt{3})}$$

$$= \frac{\sqrt{5} + \sqrt{10} - \sqrt{3} - \sqrt{6} + \sqrt{5} + \sqrt{3} - \sqrt{10} - \sqrt{6}}{5-3}$$

$$= \frac{2\sqrt{5} - 2\sqrt{6}}{2} = \frac{2(\sqrt{5} - \sqrt{6})}{2}$$

$$= \sqrt{5} - \sqrt{6}$$

$$58. (4) \sqrt{110\frac{1}{4}} = \sqrt{\frac{441}{4}} = \sqrt{\frac{21 \times 21}{2 \times 2}}$$

$$= \frac{21}{2} = 10\frac{1}{2} = 10.5$$

$$59. (2) 4320 = 2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 5$$

$$= 2^3 \times 3^3 \times 2^2 \times 5$$

$$\therefore \text{अभीष्ट संख्या} = 2 \times 5 \times 5 = 50$$

$$60. (1) (0.9)^3 + (0.1)^3 = 0.729 + 0.001 = 0.73$$

$$61. (1) \sqrt[3]{1000} + \sqrt[3]{0.008} - \sqrt[3]{0.125} = 10 + 0.2 - 0.5 = 9.7$$

$$62. (3) A : B = 3 : 4 = 6 : 8$$

$$B : C = 8 : 9$$

$$\therefore A : B : C = 6 : 8 : 9$$

$$63. (4) \text{अभीष्ट प्रतिशत} = \frac{32}{80} \times 100 = 40\%$$

$$64. (1) \text{बट्टा} = 650 - 572 = 78 \text{ रुपए}$$

$$\text{यदि बट्टा } x\% \text{ हो तो } \frac{650 \times x}{100} = 78$$

$$\Rightarrow x = \frac{78 \times 100}{650} = 12\%$$

$$65. (2) A = P \left(1 + \frac{R}{100}\right)^T$$

$$\Rightarrow 2 = 1 \left(1 + \frac{R}{100}\right)^3$$

दोनों पक्षों का वर्ग करने पर,

$$4 = 1 \left(1 + \frac{R}{100}\right)^6$$

$$\therefore \text{समय} = 6 \text{ वर्ष}$$

66. (3) अकेली महिला द्वारा 1 दिन में किया गया काम

$$= \frac{1}{8} - \frac{1}{10} = \frac{5-4}{40} = \frac{1}{40}$$

\therefore अकेली महिला 40 दिन में काम पूरा करेगी।

67. (3) पांचों उम्मीदवारों के प्राप्तांक = $x, x+2, x+4, x+6$ ए
 $x+8$

$$\therefore x + x + 2 + x + 4 + x + 6 + x + 8 = 185$$

$$\Rightarrow 5x + 20 = 185$$

$$\Rightarrow 5x = 185 - 20 = 165$$

$$\Rightarrow x = \frac{165}{5} = 33$$

$$\therefore \text{उच्चतम अंक} = x + 8 = 33 + 8 = 41$$

68. (2) कुल परीक्षार्थी = 80 + 60 = 140

$$\text{कुल उत्तीर्ण परीक्षार्थी} = \frac{80 \times 60}{100} + \frac{60 \times 80}{100}$$

$$= 48 + 48 = 96$$

$$\therefore \text{अभीष्ट प्रतिशत} = \frac{96}{140} \times 100 = \frac{480}{7} = 68\frac{4}{7}\%$$

$$69. (1) 5\sqrt{5} \times 5^3 \div 5^{\frac{3}{2}} = 5^{a+2}$$

$$\Rightarrow 5 \times 5^{\frac{1}{2}} \times 5^3 \div 5^{\frac{3}{2}} = 5^{a+2}$$

$$\begin{aligned} \Rightarrow 5^{1+\frac{1}{2}+3+\frac{3}{2}} &= 5^{a+2} \\ \Rightarrow 5^6 &= 5^{a+2} \Rightarrow a+2=6 \\ \Rightarrow a &= 6-2=4 \end{aligned}$$

$$\begin{aligned} [a^m \times a^n &= a^{m+n}] \\ [a^m \div a^n &= a^{m-n}] \end{aligned}$$

70. (3) $x^2 - 3x + 1 = 0$

$$\Rightarrow x^2 + 1 = 3x$$

$$\Rightarrow \frac{x^2 + 1}{x} = 3$$

$$\Rightarrow x + \frac{1}{x} = 3 \quad \dots\dots\dots (i)$$

$$\therefore \frac{x^6 + x^4 + x^2 + 1}{x^3}$$

$$= \frac{x^6}{x^3} + \frac{x^4}{x^3} + \frac{x^2}{x^3} + \frac{1}{x^3}$$

$$= x^3 + x + \frac{1}{x} + \frac{1}{x^3}$$

$$= \left(x^3 + \frac{1}{x^3}\right) + \left(x + \frac{1}{x}\right)$$

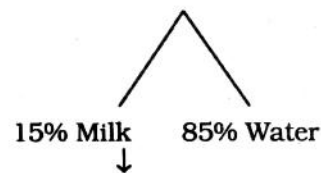
$$= \left(x + \frac{1}{x}\right)^3 - 3 \cdot x \cdot \frac{1}{x} \left(x + \frac{1}{x}\right) + \left(x + \frac{1}{x}\right)$$

$$= 3^3 - 3 \times 3 + 3 = 27 - 9 + 3 = 21$$

71. (2) 15 ltr Milk

(Add)

30 ltr Mixture



4.5 Ltr
Total Milk = 19.5 Ltr

$$= \frac{19.5}{45} \times 100 = \frac{195}{450} \times 100$$

$$= \frac{39 \times 100}{90} = \frac{390}{9} = \frac{390}{9} = 44.4\%$$

72. (2) Solⁿ :-

$$\text{w.k.t } P + R + 2Q = 59 \text{ --- (i)}$$

$$Q + R + 3P = 68 \text{ --- (ii)}$$

$$3(P + Q) + 2R = 108 \text{ --- (iii)}$$

From eqⁿ (i), (iii)

$$\text{eqⁿ (1)} \times 3 - \text{eqⁿ (iii)}$$

$$3P + 3R + 6Q = 177$$

$$3P + 3Q + 2R = 108$$

$$\boxed{3Q + R = 69} \text{ --- * (iv)}$$

$$\text{eqⁿ (iii) - (ii)}$$

$$\boxed{2Q + R = 40} \text{ (v)}$$

From (iv) and (v),

$$Q = 29, R = -18$$

Put in eqⁿ (2)

$$29 - 18 + 3P = 68$$

$$3P = 57$$

$$\boxed{P = 19} \text{ --- Ans}$$

73. (1) माना कि प्रारंभिक वेतन = x रूपये है।

वह 4% अधिक पाता है अतः वह कुल वेतन का $(100 + 4)\% = 104\%$ पाता है।

फिर भुगतान के समय 2.5% कम पाता है। अतः अधिक पाये हुए वेतन का $(100 - 2.5\%) = 97.5\%$ पाता है। अभी वह 25000 पाता है।

अतः x का 104% का $97.5\% = 25000$

$$\Rightarrow x \times \frac{104}{100} \times \frac{97.5}{100} = 25000$$

$$\Rightarrow x \times \frac{26}{25} \times \frac{975}{1000} = 25000$$

$$\Rightarrow x \times \frac{26}{25} \times \frac{39}{40} = 25000$$

$$\therefore x = \frac{25 \times 40 \times 25000}{26 \times 39}$$

$$= ₹ 24654.8$$

74. (3) \therefore Total Amount = ₹ 680

(कुल राशि)

$$A = \frac{2}{3} B \therefore A : B = 2 : 3$$

$$B = \frac{1}{4} C \therefore B : C = 1 : 4$$

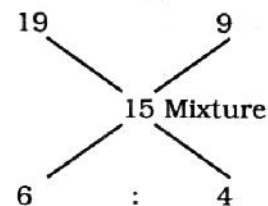
A : B : C

$$(2 \times 1) : (3 \times 1) : (3 \times 4)$$

$$2 : 3 : 12$$

$$\therefore C = \frac{12}{17} \times 680 = ₹ 480$$

75. (3) Gold Copper



$$\Rightarrow \boxed{3 : 2} \text{ Ans}$$