



**46.** (C)



## A PREMIER INSTITUTE FOR BANK PO/SSC/MCA/MBA-CAT ENTRANCE ACADEMY

- **64**.(D) The highest peak of the Eastern Ghats are Jindha Gada (1690 metres), Arma Konda (1680m) , Gali Konda (1643m) and Sinkram Gutta (1620 m) Mahendragiri is situated in the Elephant Head and it is the tallest peak of the Western Ghats. Javadi and Shevaroy are low mountain ranges in the Eastern Ghats.
- **67.** (C) Perfectly competitive firms are free to enter and exit an industry . They are not restricted by government rules and regulations, start-up cost or other barriers to entry. Like perfect competition., free entry and exit of firm is possible under monopolistic competition.
- **68.** (C) VIbrio cholera (also Kommabacillus) is a gram negative comma- shaped bacterium with a polar flagellum that causes cholera in humans.
- **69**. (D) The Din-e-IIahi (Religion of God ) was a syncretic religion prooounded by Akbar in 1582 AD. It drew inspiration from Islam and Hindusim, but some elements were also taken from Christianity, Jainsim and Zoroastrianism.
- **71.** (B) Graphite is used as pencil 'lead', As the pencil moves across the paper , layers of graphite rub off. Graphite is also used as a lubricant , and as an electirode in electrolysis for example. It is used in the manufacture of aluminum.
- **72.** (C) Excise duty is a tax on manufacture or production of goods. Excise duty on alcohol, alcoholic preparations, and narcotic substances is collected by the State Government and is called "State Excise" duty. The Excise duty on rest of goods is called "Central Excise" duty and is cloeected in terms of Section 3 of the Central Excise Act, 1944. Sales Tax is different from the Excise duty as former is a tax on the act of sale while the latter is a tax on the manufacture or production of goods.
- **73.**(C) Sachin Tendulkar, Sunil Gavaskar and Vijay Hazra are all related to cricket. Narain Karthikeyan is the first Formula one Sports persons from India.
- **75.** (D) Soda ash is a white, anhydrous, powdered or granular material containing more than 99% Sodium Carbonate is hygroscopic (absorbs moisture from the air), has an alkalie taste and forms a strongly alkaline water soluation.
- **78.** (A) Plants excrete oxygen carbon dioxide and water vapour. These gaseous waste products are got rid of by diffusion through the stomata and lenticels . The oxygen is a waste product of photosynthesis while carbon dioxide is produced in the process of respiration.
- **80.** (D) Dronacharaya Award is an award presented by the Ministry of Youth Affairs and Sports, government of India for excellence in sports coaching. The award comparises a bronze. Statuette of Droacharya, a scroll of honour and a cash compenent of Rs. 500,000.
- **82.** (C) Water is a good solevent due to its high polarity. The solvent properties of water are vital in biology, because many biochemical reactions take place only within the aqueous soluations.
- **83.** (B) London is situated on the banks of River Thames which is the longest river entirely in England and the second longest in the United Kingdom.
- **84**. (D) Christopher COckerell inented the hovercraft in 1956. His early experiments with the idea involved a cat food tin, a coffee tin and an industrial blower.
- **85.** (B) The IEEE (Institute of Electrical and Electronics Engineers) was formed in 1963 by the merger of the Institute of Radio Engineers (IRE, founded 1912) and the American Institute of Electrical Engineers (AIEE , founded 1884).
- 86. (D) Acetylene is an inflammable gas which triggers artificial ripening process in fruits . Usually fruits produce ethylene gas and a plant hormore that naturally lead to their ripening.
- **91.** (B) The Right of Children of Free and Compulsory Education Act, enacted on 4 August 2009 which provides

free and compulsory education for children between 6 and 14 in India under Article 21 a of the Indian Constitution.

- **94.** (C) Devaluation in modern monetary policy is a reduction in the value of a currency with respect to those goods, services or other monetary units with which that currency can be exchanged. It means official lowering of the value of a country's currency within a fixed exchange rate system.
- **99.** (C) Atal Bihari Vajpayee was the first Prime Miister to deliver his speech in the United Nations in Hindi on September 25, 2003. The incumbent Prime Minister Narendra Modi also delivered his speech at the UN General Assembly in New York in Hindi on 27<sup>th</sup> September 2014.
- **100.**(D) The Statue of Liberty is a colossal neoclassical sculpture on Liberty Island in the middle of New York Harbour in Manhattan of New York City (USA). The statue in an icon of freedom and of the United States. It is used as a welcoming signal to immigrant arriving from abroad.
- **101.** (A) 18 W × 12 d= 12 M× 9d  $\Rightarrow$  2 W = 1 M  $\Rightarrow$  M: W = 2 : 1 Now, (8M + 8W) × xd= 18W × 12 d  $\Rightarrow$  (8× 2+8 × 1)×x = 18× 1×12  $\Rightarrow$  x $\frac{18 \times 12}{24}$  = 9 days **102.** (D)  $\frac{1}{2}: \frac{1}{4}: \frac{5}{16}$

$$\frac{8}{16}:\frac{4}{16}:\frac{5}{16}$$
 (L. C. M. Of denominator 2, 4 and 16 is 16)

## Hence ratio is 8:4:5Difference between the biggest and the smallest is 8x - 4x=4xNow, 8x+4x+5x = 68000

$$\Rightarrow 17 \times = 68000$$
  
$$\therefore 4x = \frac{68000 \times 4x}{17x} = Rs.16000$$

17*x* 

103. (A) Let the cost of one table be Rs  $\boldsymbol{x}$  and cost of one book be Rs  $\boldsymbol{y}.$ 

ATQ, -12% of x+19% of y=160 ....(i) 12% of x-16% of y = -40 ....(ii) Adding equation (i) and (ii) , we get,  $3y = 120 \times 100$ 

$$\Rightarrow y = \frac{120 \times 100}{3} = \text{Rs 4000}$$

**104.** (C) Total income = Rs. 7800 10 % of A= 15% of B = 20% of C If 5% =1 Then, 2A = 3B = 4C L.C.M = (12)

A : B : C  

$$\frac{12}{2}$$
 :  $\frac{12}{3}$  :  $\frac{12}{4}$   
A: B: C= 6: 4: 3⇒ Total = 13 units

B's income = 
$$\frac{4}{13} \times 7800$$
 =Rs. 2400

**105.**(A)





GUPTA CLASSES					
A PREMIER INSTITUTE FOR BANK PO/SS	SC/MCA/MBA-CAT ENTRANCE ACADEMY				
$\left(\sin\theta - \cos\theta\right)^2 = \frac{49}{169}$	$\Rightarrow \frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$				
$1_{2}$ sin $\theta \cos \theta = \frac{120}{1}$	$\Rightarrow c = 10 \text{ AC} = b$				
$\frac{1}{169}$	$\Rightarrow \frac{AC}{1000} = \frac{10}{1000}$				
$(\sin\theta + \cos\theta)^2 = \sin^2\theta + \cos^2\theta + 2\sin\theta.\cos\theta$	$\sin 100^\circ  \sin 20^\circ$				
$\Rightarrow \left(\sin\theta + \cos\theta\right)^2$	$\Rightarrow AC = \frac{10311100}{\sin 20^{\circ}}$				
$= 1 + \frac{120}{289} = \frac{289}{2}$	<b>143.</b> (D) Let the speed of boat in still water is x km/hr ATO.				
169 169	$\frac{4}{4} + \frac{4}{4} = 3$				
$\Rightarrow \sin\theta + \cos\theta = \frac{17}{13}$	x+1 $x-1$				
140. (D)	$\Rightarrow \frac{4(x-1)+4(x+1)}{x^2-1} = 3$				
$D \xrightarrow{\mathbf{P} \leftarrow \mathbf{b} \ \mathbf{cm} \rightarrow \mathbf{C}}$	x - 1 $\Rightarrow 4x - 4 + 4x + 4 = 3x^2 - 3$				
5 cm +	$\Rightarrow$ 3x <sup>2</sup> -3 -8x =0				
	$\Rightarrow 3x^2 - 8x - 3 = 0$ $\Rightarrow 3x^2 - 9x + x - 3 = 0$				
$\begin{array}{ccc} A \leftarrow 6 \text{ cm} \rightarrow E & B \\ \longleftarrow & 12 \text{ cm} & \longrightarrow \end{array}$	$\Rightarrow 3x(x-3)+1(x-3)=0$ $\Rightarrow (3x+1)(x-3)=0$				
Area of quadrilateral PQCF	-1 or 2				
$=\frac{1}{2}$ (area of quadrilateral AECF)	$2 kr = \frac{3}{3} kr (kr (kr c x + kr $				
$=\frac{1}{2}(2 \times \text{area of } \Delta \text{AEF})$	144. (C)				
	Alcohol of Alcohol of 40% strength 16% strength				
$=\frac{1}{4}$ × area of quadrilateral ABCD					
$=\frac{1}{4} \times 12 \times 5 = 15 \text{ cm}^2$	Alcohol of 24% strength				
4 $  1$	24 - 16 40 - 24				
<b>141.</b> (A) Let $t = \sqrt{x} + \frac{1}{\sqrt{x}}$					
Then, $t^2 = x + \frac{1}{x} + 2$	Both the types of wine were in the ratio of 1 · 2				
	The butt with alcohol of $40\%$ strength $-\frac{1}{2}$				
$\Rightarrow t^2 = 2 + \sqrt{3} + \frac{1}{2 + \sqrt{3}} + 2$					
$\Rightarrow t^2 = 2 + \sqrt{3} + \frac{1}{\sqrt{3}} \times \frac{2 - \sqrt{3}}{\sqrt{3}} + 2$	The butler stole = $\frac{2}{3}$ part.				
$2+\sqrt{3}$ $2-\sqrt{3}$	<b>145.</b> (C) $\tan \theta + \cot \theta = 2$				
$\Rightarrow t^2 = 2 + \sqrt{3} + \frac{2 - \sqrt{3}}{4 - 3} + 2$	So, $\tan \theta = 1$				
$\Rightarrow t^2 = 2 + \sqrt{3} + 2 - \sqrt{3} + 2 = 6$	$(1) + \frac{1}{(1)^{100}} = 1 + 1 = 2$				
$\Rightarrow t = \sqrt{6}$	<b>146.</b> (D) Required time = $\frac{5040}{100} = 1.5$				
$\therefore \sqrt{x} + \frac{1}{\sqrt{x}} = \sqrt{6}$	<b>147</b> (*) Foreign exchange reserves in 2007 $-0.8 = 5040$ million				
<b>142.</b> (C)	US \$ Expression exchange reserves in $2004 - 05 = 3360$ million US				
A A	\$ · Increase = (5040 - 3360)				
60° h	= 1680 million US \$				
	$\therefore \text{ Percentage increase} = \left(\frac{1680}{3360} \times 100\right)\%$				
B/100° C	=50%				
$\angle C = (180^{\circ} - (100^{\circ} + 60^{\circ})) = 20^{\circ}$	<b>148.</b> (A) There is an increase in foreign exchange reserves during the years 2002- 03, 2004-05 and 2006-07 as				
	compared to previous year (as shown by bar-graph)				



58. (A)	83. (B)	108. (C)	133. (D)	158. (B)
59. (B)	84. (D)	109. (D)	134. (B)	159. (D)
60. (D)	85. (B)	110. (B)	135. (A)	160. (B)
61. (A)	86. (D)	111. (C)	136. (C)	161. (D)
62. (D)	87. (A)	112. (A)	137. (D)	162. (C)
63. (A)	88. (A)	113. (A)	138. (C)	163. (C)
64. (D)	89. (B)	114. (B)	139. (A)	164. (D)
65. (B)	90. (A)	115. (D)	140. (D)	165. (A)

116. (A)

117. (C)

118. (D)

119. (B)

120. (B)

121. (B)

122. (A)

123. (A)

124. (C)

125. (B)

141. (A)

142. (C)

143. (D)

144. (C)

145. (C)

146. (D)

147. (\*)

148. (A)

149. (D)

150. (C)

166. (B)

167. (B)

168. (B)

169. (D)

170. (B)

171. (A)

172. (A)

173. (B)

174. (A)

175. (D)

91. (B)

95. (B)

96. (C)

97. (C)

99. (C)

100. (D)

92. (B)

93. (D)

94.

98. (D)

8. (A)

9. (A)

10. (B)

11. (B)

12. (B)

13. (C)

14. (C)

15. (C)

16. (A)

17. (B)

18. (B)

19. (C)

20. (C)

21. (A)

22. (A)

23. (A)

24. (B)

25. (D)

33. (D)

34. (B)

35. (B)

36. (C)

37. (D)

38. (A)

39. (D)

40. (D)

41. (D)

42. (B)

43. (B)

44. (A)

45. (A)

46. (C)

47. (C)

49. (D)

50. (A)

48. (B)

66. (B)

68. (C)

69. (D)

70. (B)

71. (B)

72. (C)

73. (C)

74. (D)

75. (D)

67.

(C)

183. (A)

184. (C)

185. (A)

186. (A)

187. (C)

188. (C)

189. (A)

190. (C)

191. (A)

193. (B)

194. (C)

195. (D)

196. (D)

197. (C)

199. (B)

200. (B)

198. (C)

192. (B)