

**PART-III**

**NUMERICAL APTITUDE**

101.  $99\frac{1}{7} + 99\frac{2}{7} + 99\frac{3}{7} + 99\frac{4}{7} + 99\frac{5}{7} + 99\frac{6}{7}$  is

equal to

- (a) 603                      (b) 600  
(c) 598                      (d) 597

102. When two numbers are separately divided by 33, the remainders are 21 and 28 respectively. If the sum of the two numbers is divided by 33, the remainder will be

- (a) 10                      (b) 12  
(c) 14                      (d) 16

103. The sum of two numbers is 84 and their HCF is 12. Total number of such pairs of numbers is

- (a) 2                      (b) 3  
(c) 4                      (d) 5

104. If  $\sqrt{2} = 1.4142\dots$  is given, then is value of

$\frac{7}{(3+\sqrt{2})}$  correct to two decimal places is

- (a) 1.59                      (b) 1.60  
(c) 2.58                      (d) 2.57



116. The **wrong** number in the sequence 3, 5, 7, 9, 11, 17, 19 is  
 (a) 17 (b) 13  
 (c) 9 (d) 7
117. One tap can fill a water tank in 40 minutes and another tap can make the filled tank empty in 60 minutes. If both the taps are open, in how many hours will the empty tank be filled?  
 (a) 2 (b) 2.5  
 (c) 3 (d) 3.5
118. A, B and C together can complete a piece of work in 30 minutes. A and B together can complete the same work in 50 minutes. C alone can complete the work in  
 (a) 60 minutes (b) 75 minutes  
 (c) 80 minutes (d) 150 minutes
119. P can complete  $\frac{1}{4}$  of a work in 10 days, Q can complete 40% of the same work in 15 days, R  $\frac{1}{3}$  of the work in 13 days and S,  $\frac{1}{6}$  of the work in 7 days. Who will be able to complete the work first?  
 (a) P (b) Q  
 (c) R (d) S
120. A circle and a square have equal areas. The ratio of a side of the square and the radius of the circle is  
 (a)  $1:\sqrt{\pi}$  (b)  $\sqrt{\pi}:1$   
 (c)  $1:\pi$  (d)  $\pi:1$
121. The monthly salaries of A, B and C are in the ratio 2 : 3 : 5. If C's monthly salary is Rs. 12,000 more than that of A, then B's annual salary is  
 (a) Rs. 1,20,000 (b) Rs. 1,44,000  
 (c) Rs. 1,80,000 (d) Rs. 2,40,000
122. If A : B = 1 : 2, B : C = 3 : 4, C : D = 6 : 9 and D : E = 12 : 16 then A : B : C : D : E is equal to  
 (a) 1 : 3 : 6 : 12 : 16  
 (b) 2 : 4 : 6 : 9 : 16  
 (c) 3 : 4 : 8 : 12 : 16  
 (d) 3 : 6 : 8 : 12 : 16
123. If  $x : y = 2 : 5$ , then  $(5x + 3y) : (5x - 3y)$  is equal to  
 (a) 5 (b) 3  
 (c) -3 (d) -5
124. The diameter of the base of a right circular cone is 4 cm and its height  $2\sqrt{3}$  cm. The slant height of the cone is  
 (a) 5 cm (b) 4 cm  
 (c)  $2\sqrt{3}$  cm (d) 3 cm
125. A dealer marks his goods 20% above their cost price. He then allows some discount on marked price so that he makes a profit of 10%. The rate of discount is  
 (a)  $10\frac{1}{3}\%$  (b)  $9\frac{1}{3}\%$   
 (c)  $8\frac{2}{3}\%$  (d)  $8\frac{1}{3}\%$
126. When a shopkeeper gives 10% discount on the list price of a toy, his gain is 20%. If he had given a discount of 20%, his percentage of gain would have been  
 (a)  $6\frac{2}{3}\%$  (b)  $8\frac{1}{3}\%$   
 (c) 10 (d) 15

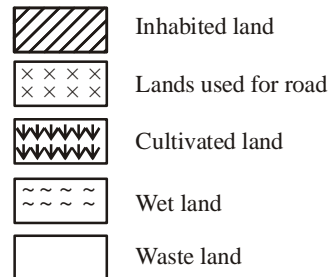
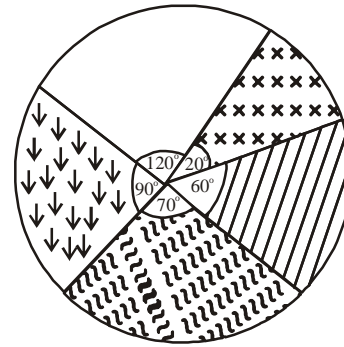
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127. The single discount equivalent of two successive discount of 20% and 5% is  
 (a) 24% (b) 25%  
 (c) 22% (d) 23%
128. A mixture of 40 litres of milk and water contains 10% of water. How much water must be added to make the water 20% in the new mixture?  
 (a) 10 litres (b) 7 liters  
 (c) 5 liters (d) 3 liters
129. The average age of a husband and wife, who were married 4 years ago, was 25 years at the time of their marriage. The average age of the family consisting of husband, wife and child, born during the interval is 20 years today. The age of child is  
 (a) 1 year (b) 2 years  
 (c) 2.5 years (d) 3 years
130. The average temperature of the first 4 days of a week was 37°C and that of the last 4 days of the week was 41°C. If the average temperature of the whole week was 39°C, the temperature of the fourth day was  
 (a) 38°C (b) 38.5°C  
 (c) 39°C (d) 40°C
131. The average of five numbers is 7. When three new numbers are included, the average of the eight numbers becomes 8.5. The average of the three new numbers is  
 (a) 9 (b) 10.5  
 (c) 11 (d) 11.5
132. A student finds the average of ten 2-digit numbers. While copying numbers, by mistake, he writes one number with its digits interchanged. As a result his answer is 1.8 less than the correct answer. The difference of the digits of the number, in which he made mistake, is  
 (a) 2 (b) 3  
 (c) 4 (d) 6
133. By selling an article for Rs. 700 a man lost 30%. At what price should he have sold it to gain 30%?  
 (a) Rs. 910 (b) Rs. 1200  
 (c) Rs. 1232 (d) Rs. 1300
134. A reduction of 20% in the price of wheat enables Lalita to buy 5 kg more wheat for Rs. 320. The original rate (in rupees per kg) of wheat was  
 (a) 16 (b) 18  
 (c) 20 (d) 21
135. Anirudha sold a bicycle at a gain of 8%. Had it been sold for Rs. 75 more, the gain would have been 14%. The cost price of bicycle was  
 (a) Rs. 1200 (b) Rs. 1250  
 (c) Rs. 1350 (d) Rs. 1500
136. Richa purchased an article at  $\frac{4}{5}$  of its list price and sold it at 20% more than the list price. Richa's profit percent was  
 (a) Rs. 460 (b) Rs. 475  
 (c) Rs. 480 (d) Rs. 500
137. A man purchased a bedsheet for Rs. 450 and sold it at a gain of 10% calculated on the selling price. The selling price of the bedsheet was  
 (a) Rs. 460 (b) Rs. 475  
 (c) Rs. 480 (d) Rs. 500
138. A student scored 32% marks in science subject out of 300. How much should he score in language papers out of 200 if he is to get overall 46% marks?  
 (a) 72% (b) 67%  
 (c) 66% (d) 60%

139. Two trains of length 137 metre and 163 metre are running with speeds of 42 km/hr and 48 km/hr respectively towards each other on parallel tracks. In how many seconds will they cross each other?
- (a) 30 (b) 24  
(c) 12 (d) 10
140. A reduction of 25% in the price of rice enables a person to buy 10 kg more rice Rs. 600. The reduced per kg price of rice is
- (a) Rs. 30 (b) Rs. 25  
(c) Rs. 20 (d) Rs. 15
141. The price of an article has been reduced by 25%. In order to restore the original price, the new price must be increased by
- (a)  $9\frac{1}{11}$  (b)  $11\frac{1}{9}$   
(c)  $33\frac{1}{3}$  (d)  $36\frac{2}{3}$
142. The production in an industry is decreased by 20% due to retirement of the senior employees. By what percent should the working hours be increased to restore the original production?
- (a) 18 (b) 20  
(c) 22 (d) 25
143. In how many years will the simple interest on a sum of money be equal to the principal at the rate of  $16\frac{2}{3}$  % per annum?
- (a) 4 (b) 5  
(c) 6 (d) 8
144. A sum of money doubles itself at some rate of compound interest in 15 years. In how many years will it become eight times of itself with the same rate?
- (a) 30 (b) 45  
(c) 48 (d) 60
145. The value of a property decreases every year at the rate of 5%. If its present value is Rs. 4,11,450, what was its value 3 years ago?
- (a) Rs. 4,50,000  
(b) Rs. 4,60,000  
(c) Rs. 4,75,000  
(d) Rs. 4,80,000
146. The speed of a boat in still water is 10 km/hr. It covers upstream a distance of 45 km in 6 hours. The speed (in km /hr) of the stream is
- (a) 2.5 (b) 3  
(c) 3.5 (d) 4

**Directions (147-150):** The pie-chart, given here, shows the land distribution of a village.

**Study the pie-chart and answer the question based on it.**



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147. The ratio of the waste land to the cultivated land is  
(a) 4 : 3                      (b) 3 : 2  
(c) 2 : 1                      (d) 3 : 1
148. What percent of total lands are used for cultivation?  
(a) 24                      (b) 25  
(c) 50                      (d) 90
149. If the total area of the village is 7200 acres, the total area of the wet land is  
(a) 1028 acres  
(b) 5040 acres  
(c) 3600 acres  
(d) 1400 acres
150. The land used for roads is what percent of the inhabited land?  
(a)  $66\frac{2}{3}$                       (b) 48  
(c)  $33\frac{1}{3}$                       (d) 30

**ANSWER SHEET**

101. (d) 102. (d) 103. (b) 104. (a) 105. (c) 106. (b) 107. (b) 108. (c) 109. (d) 110. (a)  
111. (d) 112. (c) 113. (a) 114. (d) 115. (a) 116. (c) 117. (a) 118. (b) 119. (b) 120. (b)  
121. (b) 122. (d) 123. (d) 124. (b) 125. (d) 126. (a) 127. (a) 128. (c) 129. (b) 130. (c)  
131. (c) 132. (a) 133. (d) 134. (a) 135. (b) 136. (a) 137. (d) 138. (b) 139. (c) 140. (d)  
141. (c) 142. (d) 143. (c) 144. (b) 145. (d) 146. (a) 147. (a) 148. (b) 149. (d) 150. (c)



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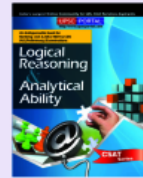
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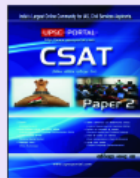
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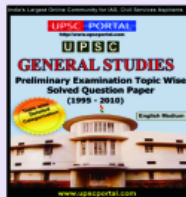
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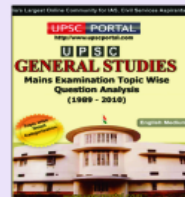


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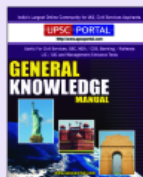


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