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SSC HIGHER SECONDARY DATA ENTRY
OPERATOR & LDC EXAM Numerical Aptitude
Solved Question Paper - 2010(Second Shift)



101.
$$\left(99\frac{1}{7} + 90\frac{2}{7} + 99\frac{3}{7} + 99\frac{4}{7} + 99\frac{5}{7} + 99\frac{6}{7}\right)$$

(1) 603(3) 598

(2) 600 (4) 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

(1) 10

(2) 12

(3) 14

(4) 16

103. The sum of two numbers is 84 and their HCF is 12. Total number of such pairs of numbers is (1) 2

(2) 3

(3) 4

(4) 5

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

the value of $(3+\sqrt{2})$ correct to

two decimal places is

(1) 1.59

(2) 1.60

(3) 2.58

- (4) 2.57

105. The number, which when multi-

plied with $(\sqrt{3} + \sqrt{2})$ gives

$$(\sqrt{12} + \sqrt{18})$$
, is

(1) $3\sqrt{2} - 2\sqrt{3}$

(2) $3\sqrt{2} + 2\sqrt{3}$

(3) √6 (4) 2√3 - 3√2

106. If x - y = 2 and $x^2 + y^2 = 20$, the value of $(x + y)^2$ is

(1) 38

(2) 36

(3) 16

(4) 12

107. is equal to

(1) √3

- (2) 3

(3) 2√3

(4) $3\sqrt{3}$

106. If $x = a + \frac{1}{a}$ and $y = a - \frac{1}{a}$, then

the value of $x^4 + y^4 - 2x^2y^2$ is

(1) 24

(2) 18

(3) 16

(4) 12

109.
$$\left(\frac{2}{\sqrt{6}+2} + \frac{1}{\sqrt{7}+\sqrt{6}} + \frac{1}{\sqrt{8}-\sqrt{7}} + 2 - 2\sqrt{2}\right)$$
 is equal to

(1) 0

(3) √6

(4) 2√7

110. The sum of two number is 8 and their product is 15. The sum of their reciprocals is

(3) 23

(4) 7

111. The length of a diagonal of a square is 15\square is

(1) 112.5 cm²

(2) 450 cm²

(3)
$$\frac{225\sqrt{2}}{2}$$
 cm²

(4) 225 cm²

112. In a A ABC, AB = 3 cm, AC = 4 cm and AD bisector of ∠A meets BC in D. Then , BD : DC is,

(1) 9 : 16

(2) 16:9

 $(3) \ 3 : 4$ (4) 4:3

113. A copper wire, when bent in the form of a square encloses a region having area 121 cm2. If the same wire is bent in the form of a circle, then the area of the region enclosed by the wire will be

$$\pi = \frac{22}{7}$$

(1) 154 cm²

(2) 143 cm²

(3) 132 cm²

(4) 121 cm²

114. Surface areas of three adjacent faces of a cuboid are p, q, r. Its volume is

(1)
$$\sqrt{pq^2 + qr^2 + rp^2}$$

(2)
$$(\sqrt{pq} + \sqrt{qr} + \sqrt{rp})(p^2 + q^2 + r^2)$$

(3)
$$\left(\sqrt{(p^2+q^2+r^2)(p+q+r)}\right)$$

(4) √pqr

115. Next term of the sequence

8, 12, 9, 13, 10, 14,, is

(1) 11

(3) 16

(2) 15 (4) 17.4

116. The wrong number in the sequence

3, 5, 7, 9, 13, 17, 19 is

(1) 17

(2) 13

(3)9

(4) 7



117. One tap can fill a water tank in 40 minutes and another top can maile the filled tank empty in 60 minutes. If both the taps are open, in how many hours will the empty tank be filled?

(1) 2 (3) B

(2) 2.5

(4) 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 week in-
 - (1) 60 minutes
 - (2) 75 minutes
 - (3) 80 minutes
 - (4) 150 minutes
- 119. P can complete of a work to 10 days, Q can complete 60% of the same work in 15 days, ft,

of the work in 13 days and S.

of the work in 7 days. Who will be able to complete the work first ?

(1) P (3) R

(2) Q (4) S

120. A circle and a square have equal areas. The ratio of a side of the square and the radius of the cir-

1: √π

(2) √4 ; }

(3) $1:\pi$

(4) n : 1

- 121. The monthly salaries of A, B and C are in the ratio 2:3:5. If C's monthly salary is ₹ 12,000 more than that of A, then B's annual salary is
 - ₹ 1.20,000
 - (2) そ 1,44,000
 - (3) ₹ 1.80.000
 - (4) ₹ 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

(1) 1:3:6:12:16

(2) 2:4:6:9:16

(3) 3:4:8:12:16

(4) 3:6:8:42:16 : ·

123. If x: y = 2: 5, then (5x + 3y)(5x - 3y) is equal to

5

(2) 3

(3) -3

 $\{4\}$ -5

124. The diameter of the base of a right circular cone is 4 cm and !ts height 2√3 cm. The slant height of the cone is

(1) 5 cm

(2) 4 cm

(3) 2√3 cm (4) 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

136. 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

(1) $6\frac{2}{3}$

(3) 10 - (4) 15

127. The single discount equivalent to two successive discounts of 20% and 5% is

> (1) 24% $(3)^{2}296$

(2) 25%

(4) 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 asixture?

(1) 10 litres (2) 7 litres 5 litres (4) 3 litres

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 a child, born during the interval to 20 years today. The age of the child is

Fycar

(2) 2 years

(3) 2.5 years

(4) 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

(1) 38°C

(2) 38.5°C

(3) 39°C

(4) 40°C

131. The average of five numbers is When three new numbers are included, the average of the eight numbers becomes 8.5. The av-erage of the three new numbers

m 9

(2) 10.5

(3) 1.1 $\{4\}$ 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 angerer is 1.8 less than the correct answer. The difference of the digits of the number, in which he made mistake, is

(1) 2

(2) 3

(3) 4 (4) 6

133. By selling an article for 7 700 a man lost 30%. At what price should he have sold it to gain 30%?

(1) ₹ 910

(2) T 1200

(3) ₹ 1232 (4) ₹ 1300

134. A reduction of 20% in the price of wheat enables Lalita to buy 5 kg more wheat for ₹ 320. The original rate (in rupees per kg) of wheat was

 $(1) \cdot 16$

(3) 20(4) 21135. Antruddha sold a bleyde at a gain of 8%. Had it been sold for 775 more, the gain would have been 14%. The cost price of the bicy-

cle was (1) 🐧 1200

(2) ₹ 1250

(3) ₹ 1350 (4) T 1500

Richa purchased an article at

of its list price and sold it at 20% more than the list price. Richa's profit percent was

(1) 50

(2)40

(3)30

(4) 25

137. A man purchased a bedsheet for ₹ 450 and sold it at a gain of 10% calculated on the selling price, The selling price of the bedsheet was

> (1) ₹ 460 (2) ₹ 475

(3) T 480

(4) ₹ 500

138. A student scored 32% marks in science subjects out of 300. How much should be score in language papers out of 200 if he is to get overall 46% marks?



(1) 72% (2) 67% (3) 60% (4) CON

139. Two trains of lengths 137 metre and 163 matre are running with speeds of 42 km/hr and 48 km/ hr respectively towards each other on papaliel tracks. In how many seconds will they cross each other?

(1) 30

(2) 24

(3) 12

(4) 10

148. A reduction of 25% in the price of rice enables a person to buy 10 kg more rice for ₹ 600. The reduced per kg price of rice is

(I) *** 30**

(2) T 25

(3) T 20

(4) T 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

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?

(1) 18

(2) 20

(3) 22

(4) 25

148. In how many years will the simple interest on a sum of money be equal to the principal at the

rate of 16 2 % per annum?

(1) 4

(2) 5

(3) 6

(4)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?

(1) 30

(2) 45

(3) 48

(4) 60

145. The value of a property decreases every year at the rate of 5%. If its present value is ₹ 4,11,540, what was its value 3 усага адо ?

(1) **₹** 4,50,000

(2) **₹** 4,60,000

(3) ₹ 4,75,000

(4) T 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

> (1) 2.5(2) 3

> (3) 3.5 (4) 4

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

Study the pie-chart and answer the questions based on it.



inhabited land

Land used for roads

Cultivated land

Wet land



Waste land

147. The ratio of the waste land to the cultivated land is

(1) 4:3

(2) 3:2

(3) 2:1

(4) 3:1

What percent of total land is used for cultivation?

 $(1)^{24}$

(2) 25

(3) 50

(4) 90

140. If the total area of the village is 7200 acres, the total area of the wet land to

(I) 1028 acres

(2) 5040 acres

(3) 3600 acres

(4) 1400 acres

150. The land used for roads is what percent of the inhabited land?

(4) 30



Answer: Numerical Aptitude

101	4	126	1
102	4	127	1
103	2	128	3
104	1	129	2
105	3	130	3
106	2	131	3
107	2	132	1
108	3	133	4
109	4	134	1
110	1	135	2
111	4	136	1
112	3	137	4
113	1	138	2
114	4	139	3
115	1	140	4
116	3	141	3
117	1	142	4
118	2	143	3
119	2	144	2
120	2	145	4
121	2	146	1
122	4	147	1
123	4	148	2
124	2	149	4
125	4	150	3