SSC CGL Exam Model Test

PART - C: QUANTITATIVE APTITUDE

101. $+ \dfrac{1}{4\times7} + \dfrac{1}{7\times10} + \dfrac{1}{10\times13} + \dfrac{1}{13\times16} = ?$

   (a) $\dfrac{5}{16}$ (b) $\dfrac{3}{16}$ (c) $\dfrac{7}{16}$ (d) $\dfrac{11}{16}$

102. $\dfrac{\dfrac{1}{5}+999\dfrac{494}{495}\times99}{4} = ?$

   (a) 25000   (b) 24225   (c) 24800   (d) 24750

103. $\left[2-\dfrac{1}{3}\right]\left[2-\dfrac{3}{5}\right]\left[2-\dfrac{5}{7}\right]\ldots\ldots\ldots\left[2-\dfrac{997}{999}\right]$ is equal to

   (a) $\dfrac{1001}{999}$ (b) $\dfrac{999}{1001}$ (c) $\dfrac{1001}{3}$ (d) $\dfrac{5}{1001}$

104. Find the value of $\dfrac{m+n}{m-n},\ if\ \dfrac{m}{n}=14$

   (a) $2\dfrac{2}{13}$ (b) $2\dfrac{7}{13}$ (c) $1\dfrac{2}{13}$ (d) $1\dfrac{5}{13}$

105. In a class, the average weight of 12 students and the class teacher is 17kg. If the age of the class teacher is not taken into consideration, then the average decreases by 2kg. Find out the weight of the class teacher.

(a) 57 kg   (b) 68 kg   (c) 41kg   (d) 71kg

106. A person covers 9 km with a speed of 3 kmph, 25 km with a speed of 5 kmph and 30 km with a speed of 10 kmph. Find out the average speed of person.

(a) $5\dfrac{9}{11}km/h$ (b) $11\dfrac{5}{9}km/h$ (c) $9\dfrac{5}{11}km/h$ (d) $5\dfrac{5}{11}km/h$

107. The average of four positive integers is 73.5. The highest integer is 108 and the least integer is 29. The difference between remaining two integers is 15. Which of the following is smaller of the remaining two integers?

(a) 80   (b) 86

(c) 71   (d) Couldn't be determined

108. If $\dfrac{a}{3}=\dfrac{b}{5}=\dfrac{c}{7}$, then find the $\dfrac{a+b+c}{b}$ value of

(a) $\dfrac{1}{5}$ (b) $\dfrac{1}{3}$ (c) 3   (d) 5

109. If 70% of a number is equal to three-fifth of another number, what is the ratio between the 1st and the 2nd numbers respectively?

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

110. The electricity bill of a certain establishment is partly fixed and partly varies as the number of units of electricity consumed. When in a certain month 540 units are consumed, the bill is Rs. 1800. In another month 620 units are

consumed and the bill is Rs. 2040. In yet another month 500 units are consumed. The bill for that month would be:

(a) Rs. 1,560   (b) Rs. 1,680   (c) 1,840   (d) Rs.1,950

111. Because of scarcity of rainfall, the price of a land decreases by 12% and its production also decreases by 4%. What is the total effect on revenue?

(a) Gain of 15%   (b) Loss of 15.48%

(c) Gain of 15.48%   (d) Loss of 15.52%

Directions (Questions 112-116): A survey of magazine reading habits of the people living in five cities P, Q, R, S and T is summarised in a table given below. The Column I in the table gives percentage of magazine-readers in each city who read only one magazine a week. The Column II gives the total number of magazine-readers who read two or more magazines a week. Read the table and then answer these questions:

City	I	II
P	75	6000
Q	80	3500
R	60	3000
S	55	2700
T	25	4200

112. The city with the lowest number of magazine-readers is:

(a) Q   (b) R   (c) S   (d) T

113. Which city has the highest number of magazine-readers who read only one magazine a week?

    (a) P   (b) Q   (c) R   (d) S

114. The highest number of magazine-readers in any given city is:

    (a) 17500   (b) 18000   (c) 24000   (d) 30000

115. How many magazine-readers in city Q read only one magazine a week?

    (a) 14000   (b) 18000   (c) 12500   (d) 16500

116. The total number of all the magazine-readers in the five cities who read only one magazine a week is:

    (a) 19400   (b) 24000   (c) 41200   (d) 42000

117. The price of an article was increased by r%. Later the new price was decreased by r% if the latest price was Re. 1, then the original price was:

    (a) Re.1   (b) Rs. $\left(\dfrac{1-r^2}{100}\right)$ (c) $Rs.\dfrac{\sqrt{1-r^2}}{100}$ (d) Rs. $\left(\dfrac{10000}{10000-r^2}\right)$

118. Peter earned 40% more money than Albert. Albert earned 20% less than Michael. Peter earned more than Michael by:

    (a) 10%   (b) 12%   (c) 20%   (d) 25%

119. A common factor of $(41^{43}+43^{43})$ and $(41^{41}+43^{41})$ is...

    (a) (43-41)   (b)   (c)   (d) (41+43)

120. Number obtained by interchanging the digits of a two digit number is more than the original number by 27 and the sum of the digits is 13. What is the original number?

    (a) 58   (b) 67   (c) 76   (d) 85

121. If the number 91876*2 is completely divisible by 8, then the smallest whole number in place of * will be:

    (a) 1   (b) 2   (c) 3   (d) 4

122. How many 3 digit numbers are divisible by 6 in all?

    (a) 149   (b) 150   (c) 151   (d) 166

123. If x and y are positive integers such that $(3x + 7y)$ is a multiple of 11, then which of the following will be divisible by 11?

    (a) $4x + 6y$ (b) $x + y + 4$ (c) $9x + 4y$ (d) $4x - 9y$

124. A rectangular courtyard 3.78 metres long and 5.25 metres wide are to be paved exactly with square tiles, all of the same size. What is the largest size of the tile which could be used for the purpose?

    (a) 147 cm   (b) 21 cm   (c) 42 cm   (d) None of these

125. The greatest number which can divide 1356, 1868 and 2764 leaving the same remainder 12 in each case, is:

    (a) 64   (b) 124   (c) 156   (d) 260

126. A, B and C start at the same time in the same direction to run around a circular stadium. A completes a round in 252 seconds, B in 308 seconds and C in 198 seconds, all starting at the same point. After what time will they meet again at the starting point?

    (a) 26 minutes 18 seconds

    (b) 42 minutes 36 seconds

    (c) 45 minutes

    (d) 46 minutes 12 seconds

127. If 'a' and 'b' are two odd positive integers, by which of the following is $(a^4 - b^4)$ Integers is always divisible?

    (a) 3   (b) 6   (c) 8   (d) 12

128. The number ($6x^2 + 6x$) for natural number x is always divisible by...

    (a) 6 and 12   (b) 12 only   (c) 6 only   (d) 3 only

129. A florist has 400 roses and 360 jasmines with him. He was asked to make garlands of flowers with only roses or only jasmines each containing the same number of flowers. What will be the largest number of flowers? He can join together without leaving a single flower?

    (a) 40   (b) 20   (c) 30   (d) 50

130. If x $x + \dfrac{1}{x} = 2$ find the value of $\sqrt{x} + \dfrac{1}{\sqrt{x}}$

    (a) $\sqrt{2}$ (b) 2   (c)1   (d)None of these

131. A car reached Raipur from Somgarh in 35 minutes with an average speed of 69 kmph. If the average speed is increased by 36 kmph, how much time will it take to cover the same distance?

    (a) 24 minutes   (b) 27 minutes   (c)23 minutes   (d)29 minutes

132. A cricket batsman had a certain average of runs for his 11 innings. In the 12th innings, he made a score of 90 runs and thereby his average of runs was decreased by 5. Find his average of runs after 12th innings.

    (a) 155   (b) 150   (c) 145   (d) 140

133. What will be the remainder when 17,200 is divided by 18?

    (a) 17   (b) 16   (c) 1   (d) 2

134. The average temperature of the town in the first four days of a month was 58 degrees. The average for the second, third, fourth and fifth days was 60 degrees. If the temperatures of the first and fifth days were in the ratio 7:8, then what is the temperature on the fifth day?

    (a) 64 degrees   (b) 62 degrees   (c) 56 degrees   (d) None of these

135. If $\log_{10} 2 = 0.3010$, the value of $\log_{10} 80$ is

    (a) 1.6020   (b) 1.9030   (c) 3.9030   (d) None of these

136. If $\log \dfrac{a}{h} + \log \dfrac{b}{a} = \log (a + b)$ then:

    a) a + b = 1   (b) a − b = 1   (c) a = b   (d) $a^2 - b^2 = 1$

137. 2, 15, 41, 80, 132, ?

    (a) 197   (b) 150   (c) 178   (d) 180

138. Find the odd number in the following series: 22, 23, 27, 36, 58, 77

    (a) 77   (b) 58   (c) 36   (d) 22

139. In an examination, a student scores 4 marks for every correct answer and losses 1 mark for every wrong answer. A student attempted all the 200 questions and scored 200 marks. Find the number of questions, he answered correctly.

    (a) 82   (b) 80   (c) 68   (d) 60

140. Solve $6x + 3y = 7xy$ and $3x + 9y = 11xy$.

    (a) $x = 1, y = 3/2$ (b) $x = -1, y = 2/3$ (c) $x = 3/2, y = 1/2$ (d) $x = 1, y = -3/2$

141. For what value of k will the following pair of linear equations have infinitely many solutions?

    $kx + 3y - (k-3) = 0$ $12x + ky - k = 0$

    (a) 2   (b) 4   (c) 6   (d) 8

142. If $x^2 - 3x + 1 = 0$, find the value of

    (a) 0   (b) 3   (c) 2   (d) 1

143. For what values of k, the equation $x^2 + 2(k-4)x + 2k = 0$ has equal roots?

    (a) 6 and 4   (b) 8 and 2   (c) 10 and 4   (d) 12 and 2

144. Nine friends have a dinner in a hotel. Eight of them spent Rs. 12 each on their meals and the ninth spent Rs.16 more than the average expenditure of all the nine. Find out the total money spent by them?

(a) Rs. 126　　　(b) Rs.135　　　(c) Rs. 111　　　(d) Rs.141

145. Salary of Mr. X is 80% of the salary of Mr. Y and the salary of Mr. Z is 120% of the salary of Mr. X. What is the ratio between the salaries of X, Y and Z, Respectively?

(a) 4:6:5　　　(b) 16:24:25　　　(c) 16:25:24　　　(d) None of these

146. A cat takes 5 leaps for every 4 leaps of a dog, but 3 leaps of the dog are equal to 4 leaps of the cat. What is the ratio of the speeds of the cat to that of the dog?

(a) 11:15　　　(b) 15:11　　　(c) 16:15　　　(d) 15:16

147. The difference between the two adjacent angles of a parallelogram is 20^0. What would be the ratio between the smaller and the larger angles of the parallelogram respectively?

(a) 4:5　　　(b) 4:7　　　(c) 3:5　　　(d) 5:6

148. If price of m articles is n, what is the price of 5 articles?

(a) $\dfrac{5n}{m}$　　　(b) $\dfrac{mn}{5}$　　　(c) $\dfrac{m}{n}$　　　(d) $\dfrac{5m}{n}$

149. If $\dfrac{2a+b}{a+4b} = 3$ then find the value of $\dfrac{a+b}{a+2b}$.

(a) $\dfrac{2}{7}$ (b) $\dfrac{5}{9}$ (c) $\dfrac{10}{7}$ (d) $\dfrac{10}{9}$

150. If $2 = \dfrac{x + \dfrac{1}{1 + \dfrac{1}{3 + \dfrac{1}{4}}}}{}$ then the value of x is :

(a) $\dfrac{12}{17}$ (b) $\dfrac{13}{17}$ (c) $\dfrac{18}{17}$ (d) $\dfrac{21}{17}$

Key

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

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