Quantitative Aptitude

Directions (Q. 101–105) *What will come in place of question mark (?) in the following questions ?*

101. $15.4 \times 13.5 \times ? = 2598.75$

(1) 13.4   (2) 10.5
(3) 11.4   (4) 12.5
(5) None of these

102. $6435.9 + 7546.4 + 1203.5 = ?$

(1) 15188.5   (2) 15185.8
(3) 15155.5   (4) 15815.8
(5) None of these

103. $4.5 \times 437 \div 19 = ?$

(1) 103.5   (2) 115.3
(3) 105.3   (4) 113.5
(5) None of these

104. $14\% \text{ of } 250 \times ?\% \text{ of } 150 = 840$

(1) 15   (2) 18
(3) 16   (4) 12
(5) None of these

105. $(?)^3 = 729$

(1) 14   (2) 7
(3) 19   (4) 11
(5) None of these

Directions (Q. 106–110) *What* **approximate** *value should come in place of the question mark (?) in the following questions ? (Note : You are not expected to calculate the exact value)*

106. $11.003 \times 19.998 \times 9.010 = ?$

(1) 1710   (2) 1680
(3) 1800   (4) 1980
(5) 1750

107. $1088.88 + 1800.08 + 1880.80 = ?$

(1) 3950   (2) 4770
(3) 4620   (4) 5040
(5) 6810

108. $8399.999 \div 375.002 \times 14.996 = ?$

(1) 565   (2) 225
(3) 335   (4) 625
(5) 455

109. $\sqrt{?} = 37.0005$

(1) 1150   (2) 1220
(3) 1570   (4) 1480
(5) 1370

110. $14.998 \% \text{ of } 619.999 = ?$

(1) 95   (2) 80
(3) 115   (4) 105
(5) 75

Directions (Q. 111–115) *What should come in place of the question mark (?) in the following number series ?*

111. 4 10 40 190 940 ? 23440

(1) 4690   (2) 2930
(3) 5140   (4) 3680
(5) None of these

112. 4000 2008 1012 ? 265 140.5 78.25

(1) 506   (2) 514
(3) 520   (4) 512
(5) None of these

113. 7 4 5 9 ? 52.5 160.5

(1) 32   (2) 16
(3) 14   (4) 20
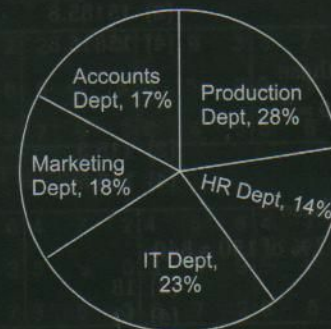(5) None of these

114. 5 54 90 115 131 140 ?
(1) 149 (2) 146
(3) 142 (4) 152
(5) None of these

115. 6 42 ? 1260 5040 15120 30240
(1) 546 (2) 424
(3) 252 (4) 328
(5) None of these

116. On Republic Day sweets were to be equally distributed among 450 children. But on that particular day, 150 children remained absent. Thus, each child got 3 sweets extra. How many sweets did each child get ?
(1) 6 (2) 12
(3) 9 (4) Cannot be determined
(5) None of the above

117. 6 men can complete a piece of work in 12 days. 8 women can complete the same piece of work in 18 days whereas 18 children can complete the piece of work in 10 days. 4 men, 12 women and 20 children work together for 2 days. If only men were to complete the remaining work in 1 day how, many men would be required totally ?
(1) 36 (2) 24
(3) 18 (4) Cannot be determined
(5) None of these

118. In how, many different ways can the letters of the word 'TRUST' be arranged ?
(1) 60 (2) 240
(3) 120 (4) 25
(5) None of these

119. What would be the compound interest accrued on an amount of ₹ 45400 at the end of two years at the rate of 15 % per annum ?
(1) ₹ 16411.5 (2) ₹ 14461.5
(3) ₹ 16461.5 (4) ₹ 14641.5
(5) None of these

120. A 320 m long train takes 80 s more to cross a platform twice its length than it takes to cross a pole at the same speed. What is the speed of the train in m/s ?
(1) 16
(2) 10
(3) 6
(4) Cannot be determined
(5) None of the above

121. A man buys a single apple for ₹ 25. If he were to buy a dozen apples, he would have to pay a total amount of ₹ 250. What would be the approximate per cent discount he would get on buying a dozen apples ?
(1) 32 (2) 20 (3) 12
(4) 8 (5) 17

122. A basket contains three blue and four red balls. If three balls are drawn at random from the basket, what is the probability that all the three are either blue or red ?
(1) 1 (2) $\frac{1}{7}$
(3) $\frac{3}{14}$ (4) $\frac{3}{28}$
(5) None of these

123. The present ages of Vishal and Shekhar are in the ratio of 14 : 17 respectively. Six-years from now, their ages will e in the ratio of 17 : 20 respectively. What is Shekhar's present age ?
(1) 17 years (2) 51 years
(3) 34 years (4) 28 years
(5) None of these

124. What would be the cost of building a fence around a circular field with area equal to 32378.5 sq. m, if the price per metre for building the fence was ₹ 154 ?
(1) ₹ 84683
(2) ₹ 86495
(3) ₹ 79326
(4) ₹ 98252
(5) None of the above

125. Amit, Sucheta and Neeti start running around a circular track and complete one round in 18, 24 and 32 seconds respectively. In how many seconds will the three meet again at the starting point if they all have started running at the same time ?
(1) 196
(2) 288
(3) 324
(4) Cannot be determined
(5) None of the above

Directions (Q. 126–130) *Study the following pie chart and table carefully to answer the questions that follow.*
Percentage breakup of employees working in various departments of an organization and the ratio of men to women in them
Percentage Breakup of Employees
Total Number of Employees = 1800

Accounts Dept, 17% | Production Dept, 28% | Marketing Dept, 18% | HR Dept, 14% | IT Dept, 23%

Ratio of Men to Women

Department	Men	Women
Production	11	1
HR	1	3
IT	5	4
Marketing	7	5
Accounts	2	7

126. What is the number of men working in the Marketing department ?
(1) 132 (2) 174 (3) 126
(4) 189 (5) None of these

127. The number of men working in the production department of the organization forms what per cent of the total number of employees working in that department ? (rounded off to two digits after decimal)
    - (1) 89.76
    - (2) 91.67
    - (3) 88.56
    - (4) 94.29
    - (5) None of these

128. What is the respective ratio of the number of men working in the Accounts department of the total number of employees working in that department ?
    - (1) 9 : 2
    - (2) 7 : 6
    - (3) 2 : 9
    - (4) 6 : 7
    - (5) None of these

129. What is the respective ratio of the number of Women working in the HR department of the Organization and the total number of employees in that department ?
    - (1) 3 : 4
    - (2) 2 : 5
    - (3) 2 : 9
    - (4) 3 : 7
    - (5) None of these

130. The number of women working in the IT department of the Organization forms approximately what per cent of the total number of employees in the Organization from all departments together ?
    - (1) 7
    - (2) 5
    - (3) 19
    - (4) 15
    - (5) 10

Directions (Q. 131–135) *Study the following table carefully to answer the questions that follow.*

Number of units manufactured (in thousands) by Six different companies over the years

Company / Year	A	B	C	D	E	F
2004	14.5	13.8	11.6	16.2	13.9	15.1
2005	15.8	14.9	12.4	16.3	14.1	15.2
2006	15.9	14.6	12.7	16.0	15.4	15.5
2007	16.0	15.0	12.9	15.3	15.7	16.1
2008	15.4	15.5	13.8	15.6	16.4	16.7
2009	16.2	16.7	14.9	16.3	16.6	16.7

131. What is the per cent increase in the number of units manufactured by Company F in the year 2008, from the previous year ? (rounded off to two digits after decimal)
    - (1) 3.73
    - (2) 3.62
    - (3) 4.35
    - (4) 4.16
    - (5) None of these

132. What is the average number of units sold by company D in the years 2004 and 2007 together ?
    - (1) 14650
    - (2) 15750
    - (3) 13750
    - (4) 16470
    - (5) None of these

133. What is the respective ratio of total number of units manufactured by company A and B together in the year 2009 to those manufactured by companies C and D together in the same year ?
    - (1) 312 : 329
    - (2) 317 : 311
    - (3) 329 : 312
    - (4) 311 : 317
    - (5) None of these

134. The number of units manufactured by company E in the year 2005 is approximately what per cent of the total number of units manufactured by in all the years together ?
    - (1) 31
    - (2) 27
    - (3) 7
    - (4) 15
    - (5) 23

135. What is the total number of units manufactured by company C over all the years together ?
    - (1) 783
    - (2) 7830
    - (3) 783000
    - (4) 78.3
    - (5) None of these

Directions (Q. 136–140) *In each of the following questions, a question followed by two statements numbered I and II are given. You have to read both the statements and then*

Give answer (1) If the data given in statement I alone are sufficient to answer the question whereas the data given in statement II alone are not sufficient to answer the question

Give answer (2) If the data given in statement II alone are sufficient to answer the question whereas the data given in statement I alone are not sufficient to answer the question

Give answer (3) If the data in either statement I alone or in statement II alone are sufficient to answer the question

Give answer (4) If the data in both the statements I and II are not sufficient to answer the question.

Give answer (5) If the data given in both the statements I and II are necessary to answer the question

136. What is Supriya's present age ?
    - I. Supriya is three years older than Priya.
    - II. The ratio between Priya's and Reshma's age is 3 : 4 respectively.

137. What is the rate of interest % per annum ?
    - I. An amount of ₹ 6200 fetches simple interest of ₹ 1736 in two years.
    - II. An amount of ₹ 4500 fetches compound interest of ₹ 1348.2 in two years.

138. How many marks did Nigam get in Biology ?
    - I. Nigam got 42 marks in English which were half the marks he got in Biology.
    - II. Nigam's marks in Biology were 14 per cent of the total marks he got in all the subjects together .

139. What is the speed of the boat in still water ?
    - I. The boat travels at the speed of 4 km/h upstream
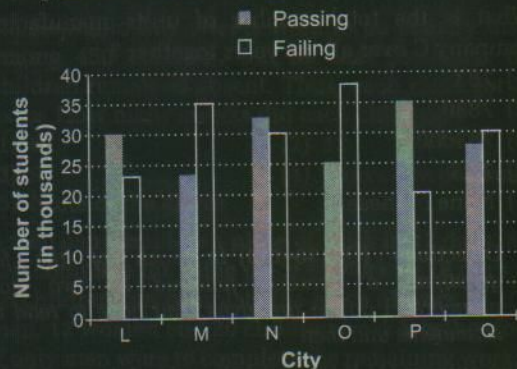   - II. The boat travels at the speed of 6 km/h downstream.

140. What is the two digit number ?
    - I. The difference between the two digits of the number is 0.
    - II. The sum of the two digits of the number is 18.

Directions (Q. 141–145) *Study the following graph carefully to answer the questions that follow.*

Number of Students (number in thousands) passing and failing in an Entrance Exam from six different cities

★ The total number of students in each city comprises the number of students passing and the number of students failing in the entrance exam.

■ Passing
□ Failing

141. What is the respective ratio of number of students passing in the entrance exam from city M to those passing from city Q ?
(1) 11 : 7　　(2) 9 : 11　　(3) 7 : 12
(4) 9 : 5　　(5) None of these

142. Number of students passing in the examination from city O is approximately what per cent of the total number of students passing in the examination from all cities together ?
(1) 4　　(2) 26　　(3) 21
(4) 9　　(5) 14

143. Number of students failing in the entrance exam from city P is what per cent of the total number of students from that city ? (rounded off to two digits after decimal)
(1) 29.75　　(2) 32.48　　(3) 36.36
(4) 27.19　　(5) None of these

144. What is the total number of students failing in the entrance exam from all the cities together ?
(1) 175000　　(2) 16800
(3) 217500　　(4) 168000
(5) None of these

145. What is the average number of students failing in the examination from cities L and M together ?
(1) 22570　　(2) 20180

(3) 21650　　(4) 28750
(5) None of these

Directions (Q. 146–150) *Study the following table carefully to answer the questions that follow.*

Per cent profit earned by six companies over the years

Company / Year	P	Q	R	S	T	U
2004	11	12	3	7	10	6
2005	9	10	5	8	12	6
2006	4	5	7	13	12	5
2007	7	6	8	14	14	7
2008	12	8	9	15	13	5
2009	14	12	11	15	14	8

146. If the profit earned by company P in the year 2007 was ₹ 2.1 lakh, what was its expenditure in that year ?
(1) ₹ 30 lakh　　(2) ₹ 15 lakh
(3) ₹ 23 lakh　　(4) ₹ 27 lakh
(5) None of these

147. What is the difference between the per cent profit earned by company Q in the year 2005 and the average per cent profit earned by the remaining companies together in that year ?
(1) 4　　(2) 2
(3) 1　　(4) 3
(5) None of these

148. If the profit earned by Company R in the year 2008 was ₹ 18.9 lakh, what was its income in that year ?
(1) ₹ 303.7 lakh　　(2) ₹ 264.5 lakh
(3) ₹ 329.4 lakh　　(4) ₹ 228.9 lakh
(5) None of these

149. What is the percentage rise in per cent profit of company T in the year 2009 from th year 2004 ?
(1) 42　　(2) 35
(3) 26　　(4) 48
(5) None of these

150. What was the average per cent profit of company S over all the years together ?
(1) 13.5　　(2) 11
(3) 12　　(4) 14
(5) None of these