

Quantitative Aptitude

Directions (Q. 91–95) In each of these questions a number series is given. Below the series one number is given followed by (a), (b), (c), (d) and (e). You have to complete this series following the same logic as in the original series and answer the question that follows.

91. 5 9 25 91 414 2282.5
3 (a) (b) (c) (d) (e)

What will come in place of (c) ?

- (1) 63.25 (2) 63.75
(3) 64.25 (4) 64.75
(5) None of these

92. 15 9 8 12 36 170
19 (a) (b) (c) (d) (e)

What will come in place of (b) ?

- (1) 18 (2) 16
(3) 22 (4) 24
(5) None of these

93. 7 6 10 27 104 513
9 (a) (b) (c) (d) (e)

What will come in place of (d) ?

- (1) 152 (2) 156
(3) 108 (4) 112
(5) None of these

94. 6 16 57 244 1245 7506
4 (a) (b) (c) (d) (e)

What will come in place of (d) ?

- (1) 985 (2) 980
(3) 1004 (4) 1015
(5) None of these

95. 8 9 20 63 256 1285
5 (a) (b) (c) (d) (e)

What will come in place of (e) ?

- (1) 945 (2) 895
(3) 925 (4) 845
(5) None of these

Directions (Q. 96–100) What approximate value will come in place of the question mark (?) in the following questions? (You are not expected to calculate exact value.)

96. $(32.51)^2 - (17.45)^2 = ?$
(1) 780 (2) 850 (3) 680
(4) 820 (5) 750

97. 88.25% of 450 = ? % of 530
(1) 70 (2) 68 (3) 75
(4) 80 (5) 65

98. $\sqrt{898} \times (12.005)^2 + ? = 5000$

- (1) 680 (2) 720
(3) 750 (4) 620
(5) 630

99. $3745 + 24.05 \times 17.98 = ?$

- (1) 2860 (2) 2800
(3) 2760 (4) 2720
(5) 2840

100. $117.95 \times 8.017 \times 4.98 = ?$

- (1) 4670 (2) 4780
(3) 4840 (4) 4720
(5) 4800

Directions (Q.101–105) In these questions, a question is given followed by information in three statements. You have to consider the information in all the three statements and decide the information in which of the statement(s) is not necessarily required to answer the question and therefore can be dispensed with. Indicate your answer accordingly

101. How many students from institute 'A' got placement ?
I. Number of students studying in institutes A and B are in the ratio of 3 : 4 respectively.
II. Number of students who got placement from institute B is 120% of the number of students who got placement from institute A.
III. 80% of the students studying in institute B got placement.
(1) None of the statements can be dispensed with
(2) Only I
(3) Only II
(4) Any one of the three
(5) Question cannot be answered even with the information in all three statements
102. What is the monthly income of Mr. X ?
I. Mr. X spends 85% of his income on various items and remaining amount is saved.
II. Monthly savings of Mr. X are ₹ 4500.
III. Out of the total money spent by Mr. X in a month, one-fifth is spent on food and remaining amount of ₹ 20400 on other items.
(1) Only II (2) Only III
(3) Only either II or III
(4) Question cannot be answered even with the information in all three statements
(5) None of the above

- 103.** What is Suchitra's present age ?
- Suchitra's present age is double the age of her son.
 - Ratio between present age of Suchitra and her mother is 2 : 3 respectively.
 - 4 yr hence the ratio between Suchitra's age and her son's age will be 13 : 24 respectively.
- Only II
 - Only III
 - Either I or II only
 - Either II or III only
 - None of the above
- 104.** What is Neeta's share in the profit earned at the end of 2 yr in a joint business run by Neeta, Seeta and Geeta ?
- Neeta invested ₹ 85000 to start the business.
 - Seeta and Geeta joined Neeta's business after six months investing amount in the ratio of 3 : 5 respectively.
 - Total amount invested by Seeta and Geeta is ₹ 2.5 lacs.
- Only II
 - Only III
 - Only either II or III
 - Information in all three statements is required for answering the question
 - Question cannot be answered even with the information in all three statements
- 105.** What is the labelled price of the article ?
- Cost price of the article is ₹ 500.
 - Selling price after offering 5% discount on the labelled price is ₹ 608.
 - Profit earned would have been 28% if no discount was offered.
- Only I
 - Only II
 - Only II and III
 - Only I and III
 - Only I and II

Directions (Q. 106–110) Study the following information carefully to answer these questions.

An institute having 450 employees has sent all its employees for training in one or more areas out of HRM, Computer Skills and Financial Skills. Employees are classified into two categories officers and clerks, which are in the ratio of 4 : 5 respectively. 10% of the officers take training only in Computer Skills, 16% of the clerks take training only in HRM which is equal to the number of officers taking training only in Financial Skills and 50% of the number of officers taking training in HRM and Financial Skills both, 6% of the total employees take training in all three of which two-third are officers. 10% of the total employees take training in HRM and Computer Skills both, which is five times the number of Clerks taking training in Computer Skills and Financial Skills. 10% of the Clerks take training in HRM and Computer Skills both. Number of officers taking training only in HRM is 25% of the number of Clerks taking training only in HRM. 20% of the total number of employees take training only in Computer Skills. Number of Clerks taking training in HRM and Financial Skills both is 20% of the total number of Clerks.

- 106.** Total how many officers take training in HRM ?
- 110
 - 128
 - 118
 - 98
 - None of these
- 107.** Total how many Clerks take training in Computer Skills but not in HRM ?
- 113
 - 104
 - 88
 - 79
 - None of these
- 108.** Total how many employees take training in Financial Skills but not in HRM ?
- 106
 - 135
 - 127
 - 134
 - None of these
- 109.** Total how many Clerks take training in Financial Skills ?
- 115
 - 106
 - 47
 - 97
 - None of these
- 110.** What per cent of the total number of Officers take training in Computer Skills but not in Financial skills ?
- 25
 - 40
 - 20
 - 15
 - None of these

Directions (Q. 111–115) Study the following table carefully to answer the questions.

Rate of Interest (P.C.P.A) Offered By Five Companies on Deposits Under Different Schemes

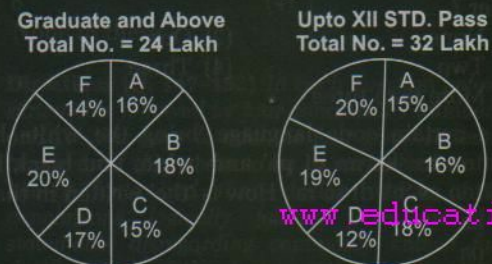
Company Scheme	A	B	C	D	E
I	8.5	9.0	8.0	8.5	9.0
II	9.5	8.5	9.0	9.0	8.5
III	8.0	8.0	7.5	8.5	8.5
IV	10.0	9.5	10.5	9.5	10.0

- 111.** Mr. X deposited an amount in Scheme II with Company C for 2 yr. After that he withdrew the amount and reinvested only the principal amount in Scheme IV of Company B for two years. Total amount of simple interest accrued from the two schemes is ₹ 14800. What was the principal amount ?
- ₹ 48000
 - ₹ 42000
 - ₹ 40000
 - Cannot be determined
 - None of these
- 112.** Company E offers compound interest under Scheme I and Company A offers simple interest under Scheme IV. What will be the difference between the interest earned under the Scheme I of Company E and Scheme IV of Company A respectively in two years on an amount of ₹ 1.2 lakhs ?
- ₹ 1428
 - ₹ 1328
 - ₹ 1528
 - ₹ 1548
 - None of these
- 113.** Company D offers compound interest under Scheme II and simple interest under Scheme IV. Abhijit invested ₹ 25000 with this company under Scheme IV and after one year switched over to Scheme II along with the interest for one more year. What is the total amount he will get at the end of two years ?
- ₹ 28939.25
 - ₹ 29838.75
 - ₹ 31748.25
 - ₹ 31738.75
 - None of these

114. Abhishek invested an amount of ₹ 45000 for two years with Company B under Scheme III which offers compound interest and Jeevan invested equal amount of two years with Company C under Scheme IV which offers simple interest. Who earned more interest and how much ?
 (1) Abhishek, ₹ 1875
 (2) Jeevan, ₹ 1875
 (3) Abhishek, ₹ 1962
 (4) Jeevan, ₹ 1962
 (5) None of the above
115. Mr Lal invested ₹ 30000 in Company A under Scheme II which offers simple interest and ₹ 48000 in Company D under Scheme II which offers compound interest. What will be the total amount of interest earned by Mr. Lal in two years ?
 (1) ₹ 14728.80 (2) ₹ 17428.50
 (3) ₹ 14827.70 (4) ₹ 16728.20
 (5) None of these

Directions (Q. 116–125) Study the following pie-charts and table to answer these questions.

Statewise Details of Adult Population of A Country



Male—Female (M : F) Ratio

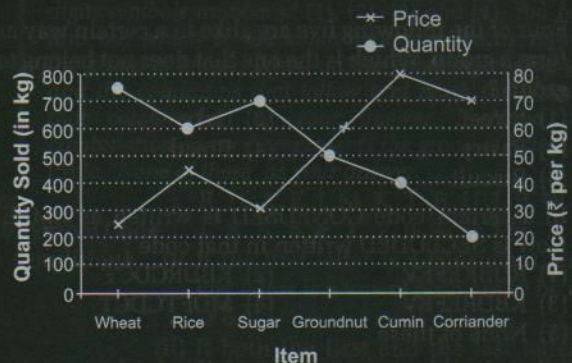
State	Graduate and Above		Upto XII Std. Pass	
	M	F	M	F
A	7	5	7	9
B	5	3	3	5
C	5	4	4	5
D	9	8	5	7
E	9	7	9	10
F	4	3	3	2

116. What is the difference between Graduate male population and XII Std. male population from State A ?
 (1) 24000 (2) 14000
 (3) 28000 (4) 36000
 (5) None of these
117. What is the ratio between Graduate female population of State E and Std. XII female population of State D respectively ?
 (1) 7 : 5 (2) 5 : 7
 (3) 16 : 15 (4) 15 : 16
 (5) None of these
118. Graduate female population of State C is what per cent of the Std. XII female population of that State ?
 (1) 40 (2) 62.5 (3) 50
 (4) 52.5 (5) None of these

119. Class XII male population of State C is what per cent of the total Std. XII population of all the states together ?
 (1) 8% (2) 12%
 (3) 11% (4) 9%
 (5) None of these
120. What is the ratio between Graduate male population of State E and Std. XII female population of that state respectively ?
 (1) 28 : 35 (2) 35 : 28
 (3) 32 : 45 (4) 45 : 32
 (5) None of these
121. Total graduate population of State F is what per cent of the total Std. XII population of State A ?
 (1) 56 (2) 72 (3) 68
 (4) 76 (5) None of these
122. Std. XII male population of State E is what per cent of the Std. XII male population of State F ?
 (1) 70 (2) 75
 (3) 68 (4) 72
 (5) None of these
123. What is the ratio between total Graduate and Std. XII male population of State A and total Graduate and Std. XII female population of that State respectively ?
 (1) 215 : 216 (2) 214 : 215
 (3) 217 : 215 (4) 215 : 217
 (5) None of these
124. What is the ratio between total Graduate population of State D and total Std. XII population of that State respectively ?
 (1) 17 : 16 (2) 16 : 17
 (3) 64 : 51 (4) 51 : 64
 (5) None of these
125. Graduate female population of State B is what per cent of the Graduate Female population of State E ? (rounded off to nearest integer)
 (1) 129 (2) 82 (3) 77
 (4) 107 (5) None of these

Directions (Q. 126–130) Study the following graph carefully to answer these questions.

Quantity of Various Items Sold and Price Per kg



126. What is the average price per kg of wheat and rice sold ? (rounded off to nearest integer)
 (1) 32 (2) 34 (3) 36
 (4) 35 (5) 31

127. If cumin is sold at a 10% discount, the quantity sold doubles. What will be the cost of total quantity of cumin sold on discount ?
- (1) ₹ 52600 (2) ₹ 28800
(3) ₹ 32000 (4) ₹ 57600
(5) None of these
128. Out of the total quantity of sugar sold, half the quantity is sold at the given rate while half the quantity is sold on a price increased by 20%. What is the total cost of entire quantity of sugar sold ?
- (1) ₹ 23100 (2) ₹ 23800
(3) ₹ 22400 (4) ₹ 23400
(5) None of these
129. If the quantities sold of Groundnut and Cumin are interchanged, what will be the total cost of quantities sold for these two items together ?
- (1) ₹ 62000 (2) ₹ 60000
(3) ₹ 65000 (4) ₹ 63000
(5) None of these
130. If the quantity of corriander sold is increased by 200% and the price per kg. is reduced by 8% what will be the total cost of corriander sold ?
- (1) ₹ 38460 (2) ₹ 36480
(3) ₹ 38640 (4) ₹ 36840
(5) None of these