

RRB OFFICE ASST. MAINS SET - 1

Directions (1-4): Study the following information carefully and answer the questions given below:

Two trains A and B running at speeds 42 km/hr and 48 km/hr respectively are approaching each other. They are [A] km far from each other. After 12 minutes, a vulture starts flying from train A towards train B at the speed of [B] km/hr. It reverses its direction as soon as it reached B and starts flying towards A and continues this until trains A and B meet. The total distance covered by it is [C] km. The vulture meets train B (first time) in half the time train A meets train B (from the time vulture started). The distance between the points where train B meets vulture for the first time and train B meets train A is 72 km. The distance between trains A and B, when the vulture meets train B for the second time is [D].

1. What should come in place of A?

- A. 180 km B. 270 km C. 288 km D. 225 km E. 305 km

2. What will come in place of B?

- A. 115 B. 145 C. 84 D. 96 E. 132

3. What should come in place of C?

- A. 288 km B. 340 km C. 270 km D. 396 km E. Can't be determined

4. What should come in place of D?

- A. 20.4 km B. 32.6 km C. 7.4 km D. 56.3 km E. 16.5 km

5. After the implementation of goods and services tax (GST), there is an increase in the price on local items by 12% and imported items by 15%. The present salary of Raman is Rs. 3570 which is equal to his expenditure. The ratio of his expenditure on local items and imported items is 3: 7. How much should the salary be increased so that he can maintain his consumption to the same level?

- A. 303.37 B. 513.77 C. 305.37 D. 503.37 E. None of these

6. Mr. Fakir Chand invested a total sum of Rs. 32,000 in two schemes S1 and S2 for 2 years. S1 offers C.I. at the rate of 20% per annum and S2 offers S.I. at the rate of 24% per annum. He earned a total of Rs. 14892 as interest from both the schemes. Find the amount invested by him in S2.

- A. Rs. 22880 B. Rs. 20850 C. Rs. 24000 D. Rs. 20300 E. Rs. 22500

7. A ship, Titanic can travel 125000 meters along the stream in 1.25 hours. If speed of the ship in still water is $125/6$ m/s, then find the time (in hours) taken by the ship to cover the same distance against the stream.

- A. $5/4$ hours B. $5/2$ hours C. $5/3$ hours D. 5 hours E. None of these

8. The CP of a Watch was Rs. x. There was a loss of 22% after selling the Watch at 40% discount. So, the shopkeeper had increased the marked price of the Watch by 40% but had allowed the same discount percent. If he earned Rs. 184 as profit after increasing the marked price, then find the value of x.

- A. 2200 B. 2000 C. 1800 D. 2400 E. None of these

9. Hari Om is 8 years older than his brother Hari Ram. Hari Ram is 24 years younger than their mother. If the ratio between the ages of Hari Om and their mother is 7: 11, what will be the age of Hari Ram after 3 years?

- A. 21 years B. 24 years C. 26 years D. 23 years E. None of these

10. A and B entered into a business and invested money in the ratio 2: 3. C enters the partnership after 4 months and is to be provided Rs. X as monthly salary from the profit apart from his share. The profit at the end of the year is Rs. 240000. If the ratio of investments by B and C is 6: 5 and B's share is Rs. 90000, then find the monthly salary (X) received by C.

A. Rs. 3950

B. Rs. 5550

C. Rs. 5000

D. Rs. 3000

E. None of these

Directions (11-13): Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer:

11. What is the speed of boat in still water?

Statement I: Amit can travel 150 km distance in 5 hours in downstream.

Statement II: Amit can travel 48 km more distance in downstream than the distance travel in upstream in 3 hours.

A. The data in statements I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.

B. The data in statements II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.

C. The data in statements I alone or in statement II alone is sufficient to answer the question.

D. The data in both the statements I and II is not sufficient to answer the question.

E. The data in both the statements I and II together is necessary to answer the question.

12. Find the difference between the two numbers X and Y.

Statement I: X is 20 less than the 2 times of Y.

Statement II: If 80 is added in the X, it becomes 3 times of Y.

A. The data in statements I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.

B. The data in statements II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.

C. The data in statements I alone or in statement II alone is sufficient to answer the question.

D. The data in both the statements I and II is not sufficient to answer the question.

E. The data in both the statements I and II together is necessary to answer the question.

13. What is the total profit earned by Company D by selling 200 sarees?

Statement I: Company D mark the marked price on saree 20% more than the cost price that is Rs 700 and gave 10% discount on marked price.

Statement II: The selling price of 30 sarees is Rs 27000 after given the discount of 20% on marked price.

A. The data in statements I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.

B. The data in statements II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.

C. The data in statements I alone or in statement II alone is sufficient to answer the question.

D. The data in both the statements I and II is not sufficient to answer the question.

E. The data in both the statements I and II together is necessary to answer the question.

Directions (14-15): Directions: Each of the questions below consists of a question and three statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the statements and give answer:

14. What is the present age of Rahul?

Statement I: At the time of marriage Rahul's age was 25 years.

Statement II: The average age of Rahul and Rahul's wife at the time of marriage was 24 years.

Statement III: The difference between the present ages of Rahul and his son is 24 years.

- A. The data in statements I alone is sufficient to answer the question, while the data in statement II and III is not sufficient to answer the question.
- B. The data in statements II alone is sufficient to answer the question, while the data in statement I and III is not sufficient to answer the question.
- C. The data in statements I alone or in statement II alone or in statement III alone is sufficient to answer the question.
- D. The data in all the statements I, II and III is not sufficient to answer the question.
- E. The data in all the statements I, II and III together is necessary to answer the question.

15. What is the ratio of the volume of the cube to the volume of the cuboid?

Statement I: The Total Surface Area of the cuboid is 352 cm^2 and the ratio of the length, breadth and height of the cuboid is 3: 2: 1.

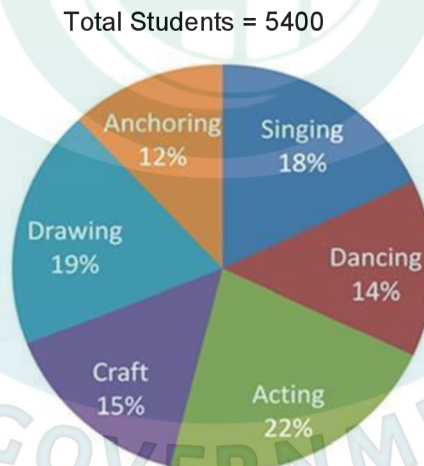
Statement II: The Total Surface Area of the cube is 726 cm^2 .

Statement III: The length of the cuboid is 1.5 times of the breadth of the cuboid and 3 times of the height of the cuboid. The difference between the height and the length of the cuboid is 8cm.

- A. The data in statements I alone is sufficient to answer the question, while the data in statement II and III is not sufficient to answer the question.
- B. The data in statements II and III is sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
- C. The data in statements I and II or in statement II and III is sufficient to answer the question.
- D. The data in all the statements I, II and III is not sufficient to answer the question.
- E. The data in all the statements I, II and III together is necessary to answer the question.

Directions (16-20): Study the following pie and table chart carefully and answer the questions given below:

The pie chart show the percentage of the students who took part in different activities and table shows the ratio of the boys and girls.



Activity	Boys : Girls
Singing	4 : 5
Dancing	3 : 4
Acting	6 : 5
Craft	3 : 2
Drawing	1 : 2
Anchoring	3 : 1

- 16.** What is the ratio of the boys who participate in craft and singing together and the girls who participate in Dancing and Drawing together?
 A. 49: 61 B. 51: 62 C. 40: 51 D. 62: 41 E. None of these
- 17.** What is the average number of boys participate in all activity?
 A. 469 B. 502 C. 453 D. 463 E. 526
- 18.** If 25% of the students, who participate in Dancing, also participate in Craft and 20% of the students who participate in Craft, also participate in Dancing, find the ratio of the students who participate in only Dancing and only Craft.
 A) 7: 8 B. 2: 3 C. 11: 10 D. 13: 17 E. None of these
- 19.** The number of boys who participate in Anchoring is what percent of the girls who participate in Acting?
 A. 85% B. 90% C. 92% D. 75% E. None of these
- 20.** If the age of the 50% of the boys participate in Acting and 40% of the girls participate in Acting is below 16 years, find the number of students whose age is above 16 years participate in Acting.
 A. 650 B. 465 C. 684 D. 556 E. None of these
- 21.** Monthly salary of Jamal is $\frac{1}{4}$ th of his father's monthly salary. Jamal's brother's monthly salary is $\frac{2}{5}$ th of their father's monthly salary. Jamal's brother pays Rs. 12,800 as home loan which is $\frac{1}{4}$ th of his monthly salary. Savings and expenses out of the monthly salary of Jamal is in the ratio of 3: 5. What is Jamal's saving each month?
 A. Rs. 12,000 B. Rs. 10,600 C. Rs. 10,400 D. Rs. 12,600 E. Rs. 12,400
- 22.** A shopkeeper mixed Soybean at Rs. 12 per kg with Soybean at Rs. 9 per kg in a ratio of "a: b" and sold the mixture at Rs. 11 per kg to have a profit of 12.5% . The value of "a: b" is
 A. 7: 20 B. 9: 12 C. 1: 2 D. 3: 4 E. None of these
- 23.** Abhishek wants to buy a 11000 mAh power bank on a condition that he will pay Rs. 500 at the time of buying, Rs. 425 at the end of 1 year and Rs. 289 at the end of second year. If the compounded interest rate is 6.25%, then what is the present value of power bank?
 A. Rs. 1150 B. Rs. 1050 C. Rs. 1156 D. Rs. 1256 E. Rs. 1080
- 24.** In an examination there are 4 subjects. Maahi secures 60% marks in Maths out of 80 marks, 75% marks in English out of 60 marks, 50% marks in Hindi out of 90 marks. If she wants to secure 60% marks in all 4 subjects, How many percent marks does she require in science out of 70 marks?
 A. 60% B. 50% C. 6% D. 75% E. 82%
- 25.** The incomes of Amitabh and Shahid are in the ratio 13: 12 and their expenditures are in the ratio 8: 7. If each saves Rs. 10000 and Amitabh spends 40% of the expenditures on food and rest on dress, then find the amount that Amitabh spent on dress.
 A. Rs. 6400 B. Rs. 9600 C. Rs. 9000 D. Rs. 8000 E. None of these
- Directions (26-30):** What will come in place of question mark (?) in the following series?
- 26.** 15, 17, 26, 47, 86, ?
 A. 132 B. 149 C. 169 D. 172 E. 152
- 27.** 8, 39, 79, 394, 789, ?
 A. 2149 B. 3542 C. 2862 D. 3944 E. None of these
- 28.** 47, 58, 71, 79, 95, ?
 A. 108 B. 107 C. 105 D. 109 E. None of these
- 29.** 7, 9, 12, 48, ?, 890
 A. 128 B. 190 C. 172 D. 168 E. None of these
- 30.** 3, 9, 24, 57, ?, 267, 552

A. 121

B. 118

C. 114

D. 126

E. None of these

Directions (31-35): Study the following table chart carefully and answer the questions given below:

The table chart given below gives the information about human resource of SBI bank across eight states of India.

States	Total Number of Branches	Total number of employees	The respective ratio of male and female employees	Percentage of post graduate employees
Bihar	196	4488	7 : 5	75%
Utter Pradesh	205	4595	3 : 2	40%
Delhi	98	2205	11 : 10	60%
Madhya Pradesh	198	4752	13 : 11	50%
Maharashtra	168	3328	17 : 15	25%
Karnataka	152	3680	11 : 9	55%
Andhra Pradesh	84	1485	8 : 7	60%
Kerala	102	2296	20 : 21	25%

- 31.** What is the respective ratio between the total number of male employees and the total number of female employees across the given eight states of India?
A. 14808: 12021 B. 14807: 12021 C. 14808: 12023 D. 14809: 12025 E. None of these
- 32.** In which of the following states, the total number of post graduates is second highest?
A. Madhya Pradesh B. Bihar C. Karnataka D. Uttar Pradesh E. None of these
- 33.** What is the difference between the sum of post graduate employees in states Bihar, Utter Pradesh, Delhi together and the number of post graduate employees in states Karnataka, Andhra Pradesh, Kerala together?
A. 3039 B. 3029 C. 3028 D. 3038 E. None of these
- 34.** It is given that across other states of India SBI has 200% number of branches than it has in the given eight states and the average number of employees per branch across India is 32. Then find how many number of total employees SBI has in India?
A. 115588 B. 124488 C. 115488 D. 123498 E. None of these
- 35.** Which of the following states has highest number of total employees per branch?
A. Karnataka B. Uttar Pradesh C. Madhya Pradesh D. Bihar E. None of these
- 36.** A committee of 5 members is to be made out of 4 women and 5 men. What is the probability that the committee has at least 3 women?
A. $\frac{3}{7}$ B. $\frac{9}{17}$ C. $\frac{5}{14}$ D. $\frac{2}{11}$ E. None of these
- 37.** A and B can separately do a work in 20 and 15 days respectively. They worked together for 6 days after which B was replaced by C. If the work is finished in next four days, the number of days in which C alone can do the work will be
A. 54 days B. 45 days C. 35 days D. 40 days E. None of these
- 38.** Two trains, A and B start from stations X and Y towards each other. They take 3 hours 22.5 mins and 2 hours 40 mins to reach Y and X respectively after they meet. If train A is moving at 48 km/hr, then the speed of train B is
A. Karnataka B. Uttar Pradesh C. Madhya Pradesh D. Bihar E. None of these
- 39.** The length of a rectangle, breadth of the same rectangle and the side of a square are in the ratio 12: 9: 11. The perimeter of the square is 264 cm. Find the area of the rectangle, if the length of the rectangle is increased by 25% and the breadth of the rectangle is decreased by 25%.
A. 3604 cm^2 B. 5126 cm^2 C. 3966 cm^2 D. 4126 cm^2 E. None of these

40. Two wage workers, Nick and Priyanka were employed to complete a work. The daily wages of the both are Rs. 4.5 and Rs. 3.5 respectively. When Nick finishes the work alone, he gets a total wage of Rs. 90. When Priyanka finishes the same work alone, she gets total wage of Rs. 105. If both of them do it together, what will be the total cost of work?

- A. Rs. 120 B. Rs. 84 C. Rs. 108 D. Rs. 96 E. None of these

ANSWERS KEY

1	2	3	4	5	6	7	8	9	10
C	E	D	B	D	D	B	B	D	C
11	12	13	14	15	16	17	18	19	20
E	E	A	D	C	B	C	A	B	E
21	22	23	24	25	26	27	28	29	30
A	A	C	A	B	B	D	D	C	D
31	32	33	34	35	36	37	38	39	40
A	A	D	C	A	C	D	C	E	D