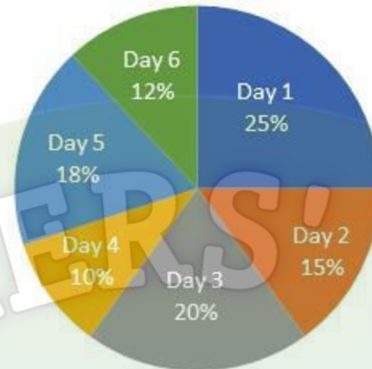


RRB OFFICE ASST. MAINS SET – 3

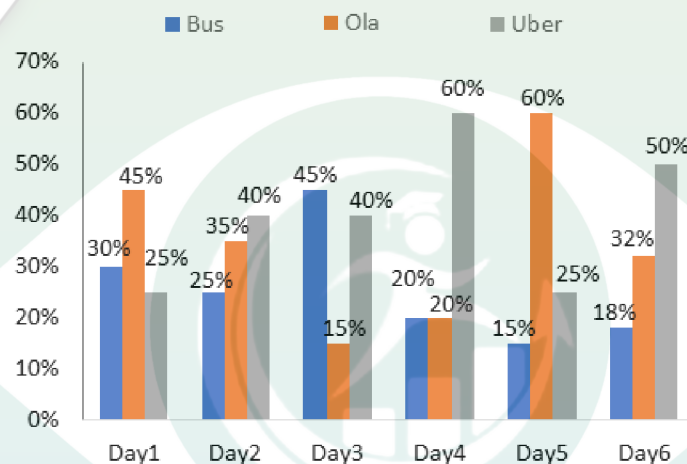
Directions (1-6): Study the following pie and bar chart carefully and answer the questions given below :

A person covers a total distance of 3000 km in 6 days, by bus, by Ola, and by Uber. Study the pie chart and bar graph to answer these questions.

The percentage of total distance travelled in 6 different days



The percentage of distance covered by each mode on each day



- 1.** What is the total distance covered by Bus?

A. 814.9 km B. 812.3 km C. 813.3 km D. 821.23 km E. None of these
- 2.** If everywhere Ola maintains an average speed of 40 km per hour then what is the total time (In hour) in six days spent on Ola? (approximately)

A. 25 hours B. 26 hours C. 27 hours D. 28 hours E. 28.5 hours
- 3.** The distance travelled by Ola is approximately how much percentage of the distance travelled by Uber? (Round off two decimal)

A. 97.21% B. 102.32% C. 98.34% D. 99.91% E. 106.29%
- 4.** Find the respective ratio of the distance travelled by Bus, Ola, and Uber.

A. 2711 : 3614 : 3675 B. 8133 : 10837 : 11020 C. 2713 : 3612 : 3675 D. 2717 : 3614 : 3681 E. None of these
- 5.** Suppose, Instead of Bus, the person uses Ola and the speed of Ola is 25% more than the speed of bus then approximately how many hours the person would save? (The average speed of bus is 30 km per hour)

A. 6.8 hours B. 7.2 hours C. 4.6 hours D. 5.4 hours E. 4.8 hours
- 6.** Suppose, on the first day, the person travelled for 18 hours and each day he decreases the traveling time by 2 hours then what can be the average speed of the person during the entire period?

A. $38 \frac{6}{13}$ km per hour B. $37 \frac{9}{13}$ km per hour C. $36 \frac{2}{13}$ km per hour

D. $37\frac{8}{13}$ km per hour

E. None of these

- 7.** The average marks of the students in four sections A, B, C and D together is 60%. The average marks of the students of A, B, C and D individually are 45%, 50%, 72% and 80% respectively. If the average marks of the students of sections B and C together is 60%. What is the ratio of number of students in sections A and D?
- A. 4 : 3 B. 3 : 4 C. 2 : 3 D. 1 : 2 E. None of these
- 8.** 1000 people voted in a resolution bill and 10% of the votes were invalid. After some discussion, the 1000 people voted again and this time there were 20% invalid votes. The opponents increased by 50% while the motion was now rejected by a majority which is 300% more than that by which it was formerly passed. How many people voted against the resolution bill after the discussion?
- A. 480 B. 450 C. 540 D. 600 E. None of these
- 9.** 20 men can make a wall in 18 days and 45 women can make the same wall in 12 days. 4 men and 9 women start working together. If after 6 days, 6 women leave and 6 men join, In how many days will the whole wall be completed?
- A. 25 days B. 20 days C. 31 days D. 35 days E. 28 days
- 10.** Shopkeepers announce the same price of Rs.700 for a shirt. The first offers successive discounts of 30% and 6% while the second offers successive discounts of 20% and 16%. The shopkeeper that offers better discount is more of
- A. Rs 22.40 B. Rs 16.80 C. Rs 9.80 D. Rs 36.40 E. None of these

Directions (11-15): 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 all the statements and give answer:

- 11.** If X is a positive integer less than 30 and $(X + 12)$ gives a prime number, then what is the value of X?
- Statement I:** $(X + 5)$ when divided by 11 gives an even quotient.
- Statement II:** $(X + 5)$ is a prime number.
- A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question
- B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question
- C. If the data either in statement I alone or in statement II alone is sufficient to answer the question
- D. If the data in both statements I and II together are necessary to answer the question
- E. If the data given in both statements I and II together are not sufficient to answer the question.
- 12.** If a man is twice as efficient as a woman, then in how many days 6 men and 4 women can complete the work?
- Statement I:** 12 men complete the same work in 10 days.
- Statement II:** 8 women complete the same work in 30 days.
- A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question
- B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question
- C. If the data either in statement I alone or in statement II alone is sufficient to answer the question
- D. If the data in both statements I and II together are necessary to answer the question
- E. If the data given in both statements I and II together are not sufficient to answer the question.

13. What will be the ratio of ages of son and his father after 15 years?

Statement I: Ratio of ages of son after 5 years and father's 3 years ago is 3 : 4 and the sum of their present ages is 57.

Statement II: Twice the father's present age is 10 more than seven times the son's present age.

- A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question
- B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question
- C. If the data either in statement I alone or in statement II alone is sufficient to answer the question
- D. If the data in both statements I and II together are necessary to answer the question
- E. If the data given in both statements I and II together are not sufficient to answer the question.

14. Whose body weight is the second highest among the five boys JJ, KK, BB, PP, and DD?

Statement I: The average weight of JJ, BB and KK is 68 kg and the average weight of PP and DD is 72 kg. Also, BB is 78 kg, PP is 68 kg and KK is 46 kg.

Statement II: The average weight of JJ, BB, KK, and PP is 68 kg and also BB is 78 kg, PP is 68 kg and KK is 46 kg. All of them have different weights.

- A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question
- B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question
- C. If the data either in statement I alone or in statement II alone is sufficient to answer the question
- D. If the data in both statements I and II together are necessary to answer the question
- E. If the data given in both statements I and II together are not sufficient to answer the question.

15. Find the amount invested by Ruma in the business.

Statement I: Total profit earned by three partners Ruma, Seema and Sarita is Rs 27,500.

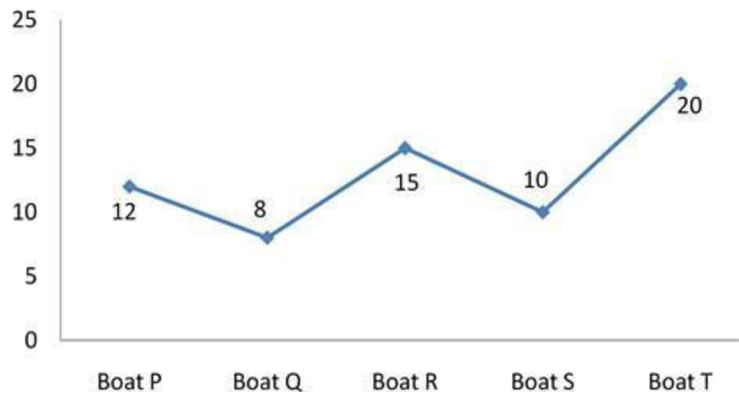
Statement II: Seema and Sarita invested Rs 25,000 and Rs 32,000 Respectively.

- A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question
- B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question
- C. If the data either in statement I alone or in statement II alone is sufficient to answer the question
- D. If the data in both statements I and II together are necessary to answer the question
- E. If the data given in both statements I and II together are not sufficient to answer the question.

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

The table shows the distance travelled by five different boats upstream and downstream in same time and the line chart shows the speed of stream

Boat	Distance (Upstream)	Distance (Downstream)
P	96	288
Q	120	240
R	100	220
S	150	350
T	180	540



- 16.** Find the ratio of the speed of Boats P and Q together in still water to the speed of Boats S and T together in still water.
- A. 25 : 32 B. 27 : 19 C. 24 : 39 D. 65 : 48 E. None of these
- 17.** If the speed of Boat R in still water is increased by 10% and the speed of stream is increased by 20%, Find the time taken by Boat R to cover the distance of 91 km upstream.
- A. 3.5 hours B. 4 hours C. 6 hours D. 2.5 hours E. None of these
- 18.** The distance between point A and point B is 210 km. Boat T travels from point A to B and comes back. What is the time taken by Boat T to cover the total distance?
- A. 10 hours B. 12.5 hours C. 14 hours D. 20 hours E. 8 hours
- 19.** The ratio of the speeds of the Boat Q to the Boat U in still water is 4 : 5. If the Boat U travels 126 km distance downstream and 81 km distance upstream in 7 hours 30 minutes, What is the speed of stream of Boat U?
- A. 15 km/h B. 10 km/h C. 20 km/h D. 12 km/h E. None of these
- 20.** The speed of Boat Q and S in still water together is approximately how much percentage more than the speed of stream of the same boats together?
- A. 70% B. 120% C. 170% D. 80% E. 270%
- 21.** If the ages of Amit and Chirag are added to twice the age of Bhola, the total becomes 59. If the ages of Bhola and Chirag are added to thrice the age of Amit, the total becomes 68 and if the age of Amit is added to thrice the age of Bhola and thrice and age of Chirag, the total becomes 108. What is the age of Amit?
- A. 24 years B. 15 years C. 12 years D. 16 years E. None of these
- 22.** Manish purchased a flat in a residential society at a certain price. After that, he sold the flat for a profit percentage which is equal to $\frac{1}{400}$ th of the price (in rupees) at which he purchased the flat. If he had received Rs. 43,824 in the transaction, at what price did he purchased the flat?
- A. Rs. 22,800 B. Rs. 26,400 C. Rs. 32,200 D. Rs. 21,000 E. None of these
- 23.** Two alloys contain zinc and copper in the ratio of 4 : 9 and 3 : 5 respectively. 65 kg of the 1st alloy, 48 kg of the second alloy and x kg pure zinc are melted together. If in the final alloy the ratio of zinc and copper is 2 : 3, Find the value of x.
- A. 20 kg B. 24 kg C. 12 kg D. 15 kg E. None of these
- 24.** Students of a class are preparing for a drill and are made to stand in a row. If 4 students are extra in a row, then there would be 2 rows less. But there would be 4 more rows if 4 students are less in a row The number of students in the class is:
- A. 96 B. 56 C. 59 D. 65 E. None of these

Directions (25-29): In each of the following questions, read the given statement and compare the Quantity I and Quantity II on its basis. (only quantity is to be considered)

25. Quantity I: The average weight of 17 students in a school is 37.5 kg. If 5 of them leave the school then the average weight of the remaining students decreases by 2.5 kg. What was the average weight of five students, who left the school?

Quantity II: In a mixture of 160 litres milk of water solution, the concentration of milk is 60%. When some litres of water are added then the concentration of milk becomes 47.29%. What is the numerical value of water added in the mixture?

- A. Quantity : I > Quantity : II B. Quantity : I ≥ Quantity : II C. Quantity : I < Quantity : II
D. Quantity : II ≥ Quantity : I E. Quantity I = Quantity II or relation can't be established

26. Quantity I: A train of length 200 m can cross a platform in 10 sec. If the train increases its speed by 25% then it can cross a person standing on the same platform in 3.2 seconds. What is the length of platform?

Quantity II: Two friends, A and B start running towards each other at the speed of 12 km per hour and 18 km per hour. After 30 seconds of starting, the distance between them is 750 meters. What will be the distance between them after 81 seconds of starting?

- A. Quantity : I > Quantity : II B. Quantity : I ≥ Quantity : II C. Quantity : I < Quantity : II
D. Quantity : II ≥ Quantity : I E. Quantity I = Quantity II or relation can't be established

27. Quantity I: Perimeter of an equilateral triangle is 54 cm then what is the area of the equilateral triangle?

Quantity II: The length of the base of a right-angled triangle is 5 cm and the height is 140% more than the base of the triangle. Find the area of the circumcircle of the triangle?

- A. Quantity : I > Quantity : II B. Quantity : I ≥ Quantity : II C. Quantity : I < Quantity : II
D. Quantity : II ≥ Quantity : I E. Quantity I = Quantity II or relation can't be established

28. Quantity I : In an organization, the regular working hours is 8 hours per day and five days in a week. Workers are paid Rs. 60 per hour for regular working hour. If a person work for overtime then he gets, 25% more than the normal working hours. A person works for four weeks and earned a total amount of Rs. 12500. How many more hours did he work?

Quantity II : The efficiency of A is 25% less than the efficiency of B. If A and B together can finish a piece of work in 120/7 days then find in how many days A can finish the same piece of work?

- A. Quantity : I > Quantity : II B. Quantity : I ≥ Quantity : II C. Quantity : I < Quantity : II
D. Quantity : II ≥ Quantity : I E. Quantity I = Quantity II or relation can't be established

29. Quantity I: The respective ratio of the present age of P and Q is 9: 7. Five years hence, the respective ratio of their ages is 5: 4. 5 years before the present age, the age of Q was how much percentage less than the age of P?

Quantity II: One person invested some amount of money at simple interest. At the end of 2nd year, he received the total amount of Rs. 7550 but at the end of 3rd year, he received the total amount of Rs. 8825. What is the rate of interest?

- A. Quantity : I > Quantity : II B. Quantity : I ≥ Quantity : II C. Quantity : I < Quantity : II
D. Quantity : II ≥ Quantity : I E. Quantity I = Quantity II or relation can't be established

30. Two shopkeepers, A and B sell the same article but at different discounts. The profit percent earned by A is same as the discount percent given by B. The cost price and marked price of the article is same for both shopkeepers. The discount given by A is 30.25% and the marked price of the article is Rs. 6400. If the cost price of the article is Rs. 3600, then find the profit earned by B.

- A. Rs. 1160 B. Rs. 1472 C. Rs. 1332 D. Rs. 1264 E. None of these

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

The following table shows the number of different items in different shops and their respective Selling Price.

Shops	Total No. of Items	AC : Cooler : Fan	Selling Price		
			AC	Cooler	Fan
A	5000	4 : 5 : 1	8000	25000	8500
B	1800	3 : 2 : 4	10000	20000	16000
C	3400	6 : 4 : 7	6000	42000	15000
D	3600	4 : 2 : 3	12000	32000	8000
E	4000	5 : 1 : 4	8000	26500	12200
F	1210	2 : 4 : 5	11000	28000	11100

31. Find the number of Fans in all the shops together.

- A. 8052 B. 6050 C. 7582 D. 9622 E. None of these

32. Find the percentage of total income which comes from Cooler from shop D.

- A. 47.05% B. 59.12% C. 42.15% D. 39.31% E. None of these

33. Find the total income earned by shop C?

- A. Rs. 2,35,60,000 B. Rs. 6,14,50,000 C. Rs. 6,18,00,000 D. Rs. 3,26,54,000 E. None of these

34. How much percent Income in Shop F is from AC?

- A. 11.6% B. 18.18% C. 16.24% D. 319.89% E. None of these

35. What is the ratio between the earnings by sale of Fan in shop B and shop E?

- A. 20 : 51 B. 39 : 70 C. 40 : 61 D. 64 : 91 E. None of these

Directions (36-38): Find the wrong term in the given series.

36. 11 132 301 590 954 1480

- A. 590 B. 132 C. 301 D. 954 E. 1480

37. 28 14.5 15.5 24.75 51.5 133.25 396.75

- A. 14.5 B. 24.75 C. 51.5 D. 133.25 E. 396.75

38. 9 28 67 121 221 337

- A. 9 B. 67 C. 28 D. 121 E. 221

Directions (39-40): What should come in place of the Question mark (?) in the following series.

39. 245 244 240 231 ? 190

- A. 190 B. 207 C. 209 D. 215 E. 240

40. 15 50 195 980 ? 41130

- A. 5878 B. 5195 C. 4980 D. 5875 E. 5035

ANSWERS KEY

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