

7. Case lets

In this type, a paragraph full of numerical information is given which might have to be transformed into a tabular form in order to answer the questions. This set is typical to the DI section in Aptitude Exams.

E 1: Study the following information carefully and answer the questions given below it.

Out of the 15,000 candidates eligible for an Officer's post in a Public Sector Bank, 450 candidates have prior experience of working in Public Sector Banks in rural areas only. 25% of the total number of candidates have prior experience of working in Public Sector Bank in urban areas only. 12% of the total number of candidates have prior experience of working in Private Sector Banks in urban areas only. 2% of the total number of candidates have prior experience of working in Private Sector banks in rural areas only. 3,600 candidates have worked in both Public and Private Sector Banks in urban areas only. 600 candidates have worked in both Public and Private Sector Bank in rural areas only. The remaining candidates have no prior experience of working in the Banking industry. 15% of the total no of candidates have experience in all the fields.

1. How many candidates have prior experience of working in rural areas (both Public Sector and Private Sector Banks together)?
1) 4,350 2) 3600 3) 4,800 4) 4,900 5) 4,850
2. How many candidates have prior experience of working in Public Sector Banks (Urban and Rural areas together)?
1) 8400 2) 8600 3) 4600 4) 4200 5) none of these
3. What is the ratio of the candidates who have a prior experience of working in Public Sector Banks in rural areas only to the candidates who have a prior experience of working in Private Sector Banks in rural areas only?
1) 4:3 2) 3:2 3) 2:3 4) 3:4 5) None of these
4. What is the total number of candidates who have worked in Private Sector Banks in urban areas?
1) 1,800 2) 2,250 3) 4,050 4) 3,600 5) None of these
5. The candidates who have no prior experience of working in the banking industry are what per cent of the candidates who have worked in Public Sector Banks in both urban and

rural areas together?

- 1) 60.5 2) 63.5 3) 62 4) 64 5) None of these

Solutions:

1.2

2.4: Total Number of candidates = 450 + 25% (15000) = 4200

3.2: Req'd ratio = 300 : 450 = 2 : 3.

4.3: Required number of candidates working in Privates Sector Banks in Urban Areas only = 1800 + 2250 = 4050

5.5: Number of candidates having no prior experience of working in banking sector = 15000
 - (450 + 3750 + 300 + 1800 + 3600 + 600 + 2250) = 15000 - 12750 = 2250 Required %

$$= \frac{2250}{3600} \times 100 = 62.5\%$$

E 2: Study the following information carefully and answer the questions given below it.

There are 2500 residents in a village. 1,375 residents from this village speak only their local language. 200 resident of the village speak the local language as well as English. The number of residents in the Village who speak the local language as well as Hindi is 625. 300 residents of the village speak all the three language ie. English, Hindi and the local language.

6. The number of residents who speak English as one of the languages forms what percent of the total residents in the village?
 1) 12 2) 8 3) 20 4) 18 5) None of these
7. The number of residence who speak only the local language forms what per cent of the total number of residents in the village?
 1) 45 2) 55 3) 58 4) 4 5) None of these
8. The number of residents who speak Hindi as one of the language is approximately what per cent of the number of residents who speak only the local language?
 1) 67 2) 70 3) 61 4) 59 5) 63
9. What is the ratio of the number of residents who speak all the three to the number of residence who speak the local language as well as Hindi?
 1) 12:55 2) 10:25 3) 14:55 4) 12:25 5) None of these

10. If 25 more people who can speak all the three languages come to reside in the village and 45 more people who can speak the local language and Hindi come to reside in the village, what would be the difference between the number of residents who can speak all the three languages and the number of residents who can speak the local language and Hindi?

- 1) 325 2) 330 3) 340 4) 355 5) None of these

Solutions:

6.3: $L \rightarrow$ local language, $E \rightarrow$ English, $H \rightarrow$ Hindi Required percentage = $\frac{500}{2500} \times 100 = 20\%$

7.2

8.1: Required percentage = $\frac{925}{1375} \times 100 = 67$

9.4: Required ratio = $300 : 625 = 12 : 25$

10.5: After addition people who speak all three languages = $300 + 25 = 325$
After addition people who speak local language as well as Hindi = $625 + 45 = 670$
Required difference = $670 - 325 = 345$.

E 3: Study the following data carefully and answer the questions that follow.

In a school having 400 students, boys and girls are in the ratio of 3:5. The students speak Hindi, English or both the language. 12% of the boys speak only Hindi. 22% of the girls speak only English. 24% of the total students speak only Hindi and the number of boys speaking both the languages is six times the number of boys speaking only Hindi.

11. How many boys speak Hindi?

- 1) 18 2) 126 3) 108 4) 26 5) None of these

12. How many girls speak only Hindi?

- 1) 55 2) 117 3) 96 4) 78 5) None of these

13. How many students speak English?

- 1) 304 2) 79 3) 225 4) 117 5) None of these

14. The number of girls speaking only Hindi is what per cent of the total number of students speaking only Hindi?

- 1) 38.2% 2) 71.8% 3) 31.2% 4) 78% 5) None of these

15. What is the ratio of the number of boys to the number of girls speaking both the languages?

- 1) 23:25 2) 12:25 3) 12:13 4) 25:13 5) None of these

Solutions:

11.2: $18 + 108 = 126$

12.4

13.1: $79 + 225 = 304$

14.5: $\frac{78}{96} \times 100 = 81.25\%$

15.3: Ratio = $\frac{108}{117} = \frac{12}{13}$

E 4: Study the information carefully to answer the questions that follow.

A school consisting of a total of 1560 students has boys and girls in the ratio of 7:5. All the students are enrolled in different types of hobby classes, viz Singing, Dancing and painting classes. Twenty per cent of the girls are enrolled in only painting classes. Ten per cent of the boys are enrolled in only Singing classes. Twenty four per cent of the girls are enrolled in both Singing and Dancing classes together. The number of girls enrolled in only Singing classes is two hundred per cent of the boys enrolled in the same. One-thirteenth of the boys are enrolled in all the three classes together. The ratio of boys enrolled in Dancing and Painting classes together to the girls enrolled in the same is 2 : 1. Ten per cent of the girls are enrolled in only Dancing classes whereas eight per cent of the girls are enrolled in both Dancing and Painting classes together. The remaining girls are enrolled in all the three classes together. The number of boys enrolled in Singing and Dancing classes together is fifty per cent of the number of girls enrolled in the same. The remaining boys are enrolled in only Painting classes. number of boys enrolled in only dancing is same as those of girls enrolled in singing.

16. What is the total number of boys who are enrolled in Dancing?

- 1) 318 2) 364 3) 292 4) 434 5) None of these

17. Total number of girls enrolled in Singing is **approximately** what per cent of the total number of students in the school?

- 1) 37 2) 19 3) 32 4) 14 5) 26

18. What is the total number of students enrolled in all the three classes together?

- 1) 135 2) 164 3) 187 4) 142 5) None of these

19. Number of girls enrolled in only Dancing classes is what percent of the boys enrolled in the same? (rounded off to two digits after decimal)

1) 38.67 2) 35.71 3) 41.83 4) 28.62 5) None of these

20. What is the ratio of the number of girls enrolled in only Painting classes to the number of boys enrolled in the same?

1) 77:26 2) 21:73 3) 26:77 4) 73:21 5) None of these

Solutions:

16.4: Hint: Total number of boys who are enrolled in dancing = $182 + 70 + 104 + 78 = 434$

17.5: Required = $\frac{(156+182+65)}{1560} \times 100 = \frac{403}{1560} \times 100 = 25.86 = 26\%$

18.1

19.2: Required % = $\frac{65}{182} \times 100 = 35.71$

20.3: Required % ratio = $\frac{130}{385} = 26:77$

Practice Exercise:

Refer to the following information to answer the questions that follow.

The population of a town in 1998, consisted of 45% men, 35% women and the remaining children of the children, 40% were: female and 60% male. Of the men, 10% were over the age of 60 years and 25% below the age of 40 years. Of the women, 20% were over the age of 60 years and an equal number were under 40 years of age. The number of men increased by 4% in 1999 and that of women increased by 6% The population of the town in 1998 was 2,00,000.

1. What is the number of men in 1999?

1) 90,000 2) 92,000 3) 93,600 4) 94,200

2. What was the number of adults above the age of 60 years in 1998?

1) 20,000 2) 23,000 3) 26,000 4) Cannot be determined

3. What percentage of the population in 1999 consisted of children?

1) 16% 2) 20% 3) 13% 4) Cannot be determined

4. What percentage of the total females in 1998 were children.

1) 18.6% 2) 20% 3) 15.7% 4) Cannot be determined

5. What percentage of the population in 1998 are women below 40 years of age?

1) 20% 2) 15% 3) 7 % 4) None of these

6. What is the number of women in 1999?

- 1) 70,000 2) 74,2003) 78, 100 4) None of these

Refer to the following Information to answer the question that follow.

ABC Ltd. is operating in 4 businesses Viz. beverages, automobiles, refrigeration and electronics. The net capital allotted for these four each year is in proportion to the profit they generated in the previous year. Furthermore, the capital allotted to them in the previous year was ₹ 32 Crores, ₹ 38 crores, ₹ 41 crores and ₹ 45 crores respectively for beverages, automobiles, refrigeration and electronics. The net profit generated in the previous year was shared in the ratio as follows – 20%, 30%, 15% and 35%, in the same order. The profit this year has increased by 3%, 2%, 6% and 7% in the same order. Further more, the company is planning to get out of the refrigeration business and divide its capital equally among the remaining three. The total capital to be allotted this year is ₹ 40 crores. The net profit last year was ₹ 10 crores.

7. The profit (in ₹ crores) for beverages this year is

- 1) 4.3 2) 2.06 3) 1 4) 6.01

8. Total profits (in ₹ crores) generated this year is

- 1) 14.33 2) 22.223) 6.82 4) 10.46

9. The capital (in ₹ crores) allotted for automobiles this year is

- 1) 8 2) 10 3) 12 4) 16

10. After the closure of the refrigeration business, the capital (in ₹ crores) allocated this year for electronics is

- 1) 16 2) 24 3) 10 4) 20

11. The capital (in ₹ crores) allotted for electronics this year is

- 1) 10 2) 12 3) 14 4) 16

12. After the closure of the refrigeration business, the capital (in ₹ crores) allocated this year for automobile is

- 1) 14 2) 24 3) 10 4) 20

In each question, there are two statements A and B, either of which can be true or false on the basis of the information given below.

The financial highlights of the flexible Packaging industry revealed several facts. The net profits of the 3 industry majors were ₹ 3.05 crores (Paper Products), ₹ 2.60 crores (Sharp Industries) and ₹ 6.4 crores (Flex Ind) during 1992-93. Corresponding figures for 1991-92 were ₹ 0.51, ₹ 1.37, and ₹ 3.38 crores for Paper Products, Sharp Industries, and Flex Industries respectively, for 1992-93, The gross profits (if Sharp Industries, Paper products, and Flex industries have been ₹ 3.57 crores, ₹ 6.34 crores and ₹ 10.40 crores respectively for 1992-93. Current equity base of Flex Industries, Paper Products, and Sharp Industries are ₹ 12.47 crores, ₹ 3.44 crores and ₹ 4.56 crores respectively.

It is known that the Gross Profits - Interest = Net Profit

Choose 1) if only statement (A) is true

Choose 2) if only statement (G) is true

Choose 3) if both statements (A) and (B) are true

13. **Statement A:** The total interest paid by the 3 industry majors during 1992-93 is ₹ 8.26 crore.

Statement B: The percentage growth rate for net profits of flex industries during 1991-93 is 75%.

14. **Statement A:** In year 1992-93 the ratio (Net Profit / Gross Profit) is the maximum for Paper product.

Statement B: Sharp Industries has shown the maximum percentage change in net profits over the period 1991-93.

15. **Statement A:** The interest paid in year 1992 – 93 by paper products is ₹ 0.52 crores.

Statement B: The interest paid in year 1992 – 93 by paper products is ₹ 0.40 crores

16. **Statement A:** The total Net profit of the 3 industry majors during 1991-92 is ₹ 5.26 crore.

Statement B: The total Net profit of the 3 industry majors during 1991-92 is ₹ 5.26 crore.

17. **Statement A:** The total Net profit of the 3 industry majors during 1992- 93 is ₹ 12.05 crore.

Statement B: The total Net profit of the 3 industry majors during 1992- 93 is ₹ 12.05 crore.

18. **Statement A:** The net profit of Flex Industries in 1992-93 is 1~0% of the net profit of Paper Products in the same year.

Statement B: The net profit of paper products in 1992-93 is 48% of the net profit of flex industries in the same year.

Answers:

1.3 2.2 3.4 4.1 5.3 6.2 7.2 8.4 9.3 10.1 11.3 12.1 13.1
14.4 15.4 16.1 17.1 18.1

