

**Explanation for selected questions of Paper- II (Series A) of APPSCCE-2024**

**Q. 32**

**Solution:**

- Arts: 41.7%
- Science: 33.3%
- Commerce: 25.0%

Together, Arts and Science account for:  $41.7\% + 33.3\% = 75.0\%$

Let the total number of students be  $x$ . Then 75.0% of the total students equals:

Total Arts + Science students =  $0.75x$

If  $0.75x$  equals 250, 260, 270, or 280, solve for  $x$  (the total number of students).

Since the number of students cannot be in decimal and only in whole number therefore,

- Option A: 250  
Total  $x = 250/0.75 = 333.33$  (not valid)
- Option B: 260  
Total  $x = 260/0.75 = 346.67$  (not valid)
- Option C: 270  
Total  $x = 270/0.75 = 360$  (**valid**)
- Option D: 280  
Total  $x = 280/0.75 = 373.33$  (not valid)

The correct option is **C) 270**.

**Q. 35.**

**Ans:** To determine the approximate percentage of sales generated by online channels:

From the pie chart:

- **Online Sales** = 45.0%
- **Offline Sales** = 40.0%
- **Other** = 15.0%

The answer is directly given as **45%** for online sales.

So it cannot be less than 45%, therefore option A is eliminated.

So approximate number closest to 45% from the options is 48%

The correct option is: **[B] 48%**

**Q. 38.**

Ans: The pie chart shows the preferred modes of transportation for students, with the following percentages:

- **Car:** 35.0%
- **Bus:** 25.0%
- **Bike:** 15.0%
- **Other:** 15.0%
- **Walking:** 10.0%

**Evaluating the Options:**

- **Option [A]:** More students from Alpha college prefer to walk or bike compared to those from Beta college
  - The chart only shows the overall percentages, not a breakdown for Alpha or Beta. Thus, we cannot confirm this.
- **Option [B]:** A higher percentage of students from Beta college prefer to take the bus compared to those from Alpha college
  - The chart does not provide a comparison between Alpha and Beta specifically. This option cannot be verified.
- **Option [C]:** The majority of students from both colleges prefer to travel by car
  - The pie chart shows that 35% of students prefer cars. Since this is the largest percentage (majority), **this statement is true.**
- **Option [D]:** There is no significant difference in preferred modes of transportation between the two colleges
  - The chart does not distinguish between Alpha and Beta, so we cannot determine if there's a significant difference.

The correct answer is [C]: "The majority of students from both colleges prefer to travel by car."