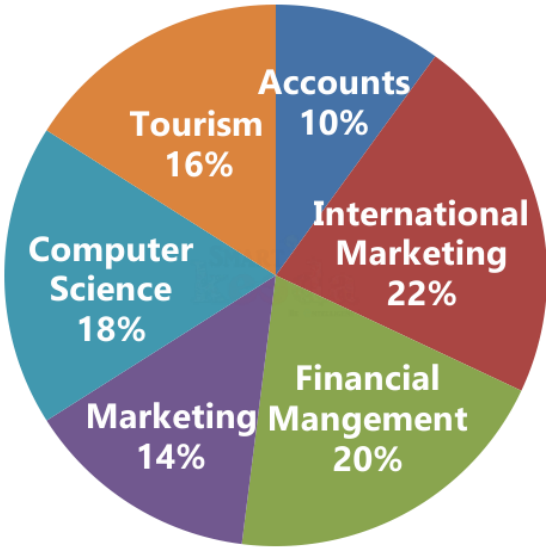
Date Interpretation Mixed Chart Questions Quiz for Bank PO Exams.

Data Interpretation Mixed Chart Quiz 4

Direction: Study the following table carefully and answer the questions based on it.

Percentagewise distribution of Lecturers in six different subjects in a Central university



Ratio of male to female lecturers in the university		
Lecturers	Male	Female
Computer Science	1	2
Marketing	4	3
Financial Management	6	4
International Marketing	7	4
Accounts	2	3
Tourism	6	2

1. What is the difference between the number of male lecturers and female lecturers in the university?

A. 3500 B. 2506 C. 2238 D. 2410 E. None of these

2. The total number of lecturers (both male and females) in Marketing is approximately what per cent of the total number of female lecturers in Accounts and Tourism together?

A. 170% B. 150% C. 180% D. 140% E. 200%

3. The total number of male lecturers in Marketing, Accounts and Tourism is approximately what per cent of the female lecturers from Computer Science, Financial Management and International Marketing?

A. 103% B. 93% C. 86% D. 8% E. None of these

4. What is the ratio of the number of female lecturers from Tourism and Accounts to that of male lecturers in Financial Management and Computer Science?

A. 2 : 1 B. 1 : 2 C. 4 : 5 D. 3 : 2 E. None of these

5. If the total number of lecturers is reduced by 50% then what is the total number of male lecturers in Marketing, International marketing and Tourism together?

A. 2756 B. 2758 C. 2751 D. 3750 E. None of these

Correct Answers:

1	2	3	4	5
C	D	C	E	E

Explanations:

1. Total number of lecturers,

In Accounts = $\frac{18650 \times 10}{100} = 1865$

Similarly, in Tourism = $\frac{18650 \times 16}{100} = 2984$

In Computer Science = $\frac{18650 \times 18}{100} = 3357$

In Marketing = $\frac{18650 \times 14}{100} = 2611$

In Financial Management = $\frac{18650 \times 20}{100} = 3730$

In International Marketing = $\frac{18650 \times 22}{100} = 4103$

Difference between male and female lecturers in the university

$= \left(-\frac{1}{3} \times 3357 + \frac{1}{7} \times 2611 + \frac{2}{10} \times 3730 + \frac{3}{11} \times 4103 - \frac{1}{5} \times 1865 + \frac{4}{8} \times 2984\right)$

= [– 1119 + 373 + 746 + 1119 – 373 + 1492] = 3730 – 1492 = 2238.

Hence, option C is correct.

2. Total number of lecturers,

In Marketing = $\frac{18650 \times 14}{100}$ = 2611

In Accounts = $\frac{18650 \times 10}{100}$ = 1865. So, Female lecturers = 1865 × $\frac{3}{5}$ = 1119

Similarly, in Tourism = $\frac{18650 \times 16}{100}$ = 2984. So, female lecturers = 2984 × $\frac{2}{8}$ = 746

Reqd. % = $\frac{\text{Total number of lecturers in Marketing} \times 100}{\text{Total number of female lecturers (Accounts + Tourism)}}$

= $\frac{2611}{1119 + 746} \times 100 = \frac{2611 \times 100}{1865}$ = 140%

Hence, option D is correct.

3. Total number of lecturers,

In Marketing = $\frac{18650 \times 14}{100}$ = 2611. So, male lecturers = 2611 × $\frac{4}{7}$ = 1492

In Accounts = $\frac{18650 \times 10}{100}$ = 1865. So, male lecturers = 1865 × $\frac{2}{5}$ = 746

In Tourism = $\frac{18650 \times 16}{100}$ = 2984. So, male lecturers = 2984 × $\frac{6}{8}$ = 2238

Similarly,

In Computer Science = $\frac{18650 \times 18}{100}$ = 3357. So, female lecturers = 3357 × $\frac{2}{3}$ = 2238

In Financial Management = $\frac{18650 \times 20}{100}$ = 3730. So, female lecturers = 3730 × $\frac{4}{10}$ = 1492

In International Marketing = $\frac{18650 \times 22}{100}$ = 4103. So, female lecturers = 4103 × $\frac{4}{11}$ = 1492

Reqd. % = $\frac{\text{Male lecturers (Marketing + Accounts + Tourism)} \times 100}{\text{Female Lecturers (Computer Science + Financial Management + International Marketing)}}$

= $\frac{1492 + 746 + 2238}{2238 + 1492 + 1492} \times 100 = \frac{4476}{5222} \times 100 = 85.71 \approx 86\%$

Hence, option C is correct.

4.

$$\text{Reqd. ratio} = \frac{\text{Female lecturers (Tourism + Accounts)}}{\text{Male lecturers (Financial Mgt + Computer)}}$$

$$= \frac{2984 \times \frac{2}{8} + \frac{1865 \times 3}{5}}{\frac{3730 \times 6}{10} + \frac{1}{3} \times 3357}$$

$$= \frac{746 + 1119}{2238 + 1119} = \frac{1865}{3357} = \frac{5}{9} = 5 : 9$$

Hence, option E is correct

5. After reducing 50% of 18650 (total no.) lecturers = 9325.

Total number of male lecturers in Marketing, International Marketing and Tourism

$$= \left[\frac{4}{7} \times \frac{14}{100} \times 9325 + \frac{7}{11} \times \frac{22}{100} \times 9325 + \frac{6}{8} \times \frac{16}{100} \times 9325\right]$$

$$= \frac{9325}{100}\left[\frac{4}{7} \times 14 + \frac{7}{11} \times 22 + \frac{6}{8} \times 10\right]$$

$$= \frac{9325}{100} \times (8 + 14 + 12) = \frac{9325 \times 34}{100} = 3170.5 \approx 3171.$$

Hence, option E is correct.