



# UGC-NET

Paper - 1

NATIONAL TESTING AGENCY (NTA)

PAPER – 1 || VOLUME – 3

**D.I., ICT, PEOPLE, DEVELOPMENT AND  
ENVRINMENT & HIGHER EDUCATION  
SYSTEM**



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# Unit - 7

## Data Interpretation

Most of the questions asked in the DI section are based on the following topics of arithmetic section -

1) Average

$$= \frac{\text{Sum of values}}{\text{No. of values}}$$

2) Ratio

= Comparison of similar terms  
in simpler form

### 3) Percentages

(i) A is what % of B

(ii) A is what % less than B

(iii) A is what % more than B

### 4) Percentage change

$$\text{Difference} : \frac{\text{Final value} - \text{Initial value}}{\text{initial value}} \times 100$$

### Types of DI charts —

1) Pie charts (Imp)

2) Line charts

3) Table (Imp)

4) mixed Charts

5) Bar Graphs

Imp

In NTA NET try ~~to~~ not to do approximation because options are near about.

Tip 2

Solve questions in the order in which they appear. Because it is usually seen that the answer to first question is useful in solving the next question.

Tip 3

Don't use calculator while practice.

Tip 4

Interpret the data before you begin with calculations.

Tip 5

Try to learn basic tables (1-20) and ~~add~~ small calculations without pen or paper.

## PYQ (Set - 1)

Consider the following table that shows the distribution of students in two sections A and B in a school according to the marks obtained by them. There is a total of 45 students in each section.

Marks Obtained by Students

marks in Class Interval	Number of students in	
	Section A	Section B
0-9	2	4
10-19	5	5
20-29	10	9
30-39	4	4
40-49	8	7
50-59	4	5
60-69	7	5
70-79	5	6





Explanation:

$$40 - 49 \rightarrow 7$$

$$50 - 59 \rightarrow 5$$

$$60 \rightarrow 69 \rightarrow 5$$

$$70 \rightarrow 79 \rightarrow 6$$

23 Pass Students in Section - B

Total Students = 45

Hence result = 51%

Q3 How many students in Section A and Section B together have obtained marks less than 10?

(1) 10

(B) 12

(2) 11

(C) 6

sol

4

Explanation: Section A

Section B

Marks < 10

2

4

so total = 6

Q4 If the pass mark is 30, what is the number of failures in both the sections together?

(1) 43

(2) 35

(3) 16

(4) 26

Sol 2

Explanation:

	Section A	Section B
marks < 30	2 + 5 + 10	4 + 5 + 9
	= <span style="border: 1px solid black; padding: 2px 10px;">35</span>	

Q5 How many students in section A and section B have obtained 50 or more than 50 marks?

(1) 23

(2) 43

(3) 32

(4) 34

Sol 3

Explanation:

	Section A	Section B
marks $\geq$ 50	4 + 7 + 5	5 + 5 + 6
	= <span style="border: 1px solid black; padding: 2px 10px;">32</span>	

## PYQ (Set-2)

Table below shows the percentage wise distribution of no. of laptops sold by a shopkeeper during a period of six months from april to sep 2018, a total of 45000 laptops have been sold during these six months.

Table 1

Sale of Laptops month wise

Name of month	% of Laptops
april	17
may	22
June	25
July	8
august	12
september	16

Table 2

Laptops Brand Ratio

Name of month	Ratio	
	H	D
April	8	7
May	4	5
June	3	2
July	7	5
August	7	8
September	7	9

Q1 what is the total no. of laptops sold of brand D during may & June together

(1) 9500

(2) 10,000

(3) 10,500

(4) 15,000

sol

10,000

Q2 If 35% of the laptops sold of brand H during August were sold at a discount, how many laptops of brand H during that month were sold without a discount?

(1) 882

(2) 1635

(3) 1638

(4) 885

sol

3

Explanation:

$$\text{Total laptops} = 45000$$

$$\text{Sold in August} = 12\% \text{ of total}$$

$$= \frac{12}{100} \times 45000$$

$$= 5400$$

$$\text{Ratio of H: D during August} = 7:8$$

so laptops sold of Brand H =

$$\frac{7}{15} \times 5400 = 2520$$

we have to sold laptops sold without discount

So, laptops sold at discount =

$$= \frac{35}{100} \times 2520$$

$$= 882$$

So, not sold at discount = Total sold  
of Brand H - Sold at discount

$$= 2520 - 882 = \boxed{1638} \text{ Ans}$$

Q3 what is the ratio of number of  
laptops sold of brand D during April  
to those sold during September of  
same brand?

(a) 119 : 145

(b) 116 : 135

(c) 119 : 135

(d) 119 : 130

sol C



Explanation:

~~For~~ April, total laptops sold =  $\frac{17}{100} \times 45000$

Laptops sold of Brand D =  $\frac{7}{15} \times \frac{17}{100} \times 45000$

September

Total laptops sold =  $\frac{16}{100} \times 45000$

Laptops sold of Brand D =  $\frac{9}{16} \times \frac{16}{100} \times 45000$

Ratio =  $\frac{7}{15} \times \frac{17}{100} \times 45000$

$\frac{9}{16} \times \frac{16}{100} \times 45000$

=  $\frac{17 \times 7}{15 \times 9}$  =  $\frac{119}{135}$

$\Rightarrow$  119 : 135

Explanation of Q.1

$$\text{Total sold in May} = \frac{22}{100} \times 45000$$

sold of Brand D in May

$$\frac{5}{9} \times \frac{22}{100} \times 45000 = 5500$$

$$\text{total sold in June} = \frac{25}{100} \times 45000$$

$$\begin{aligned} \text{sold of Brand D in June} &= \frac{2}{5} \times \frac{25}{100} \times 45000 \\ &= 450 \end{aligned}$$

$$\text{total} = 5500 + 4500 = \boxed{10,000}$$

Q4 If a shopkeeper earned a profit of rupees 434 on each laptop of brand D during July, what was his total profit earned on the laptops of that brand during the same month



(a) 6,51,900

(b) 6,46,500

(c) 6,49,500

(d) 6,51,000

Sol d

Explanation:

$$\text{Sold in July} = \frac{8}{100} \times 45000$$

$$= 3600$$

$$\text{Sold of Brand D in July} = \frac{5}{12} \times 3600$$

$$= 1500$$

$$\text{Profit earned} = 1500 \times 434$$

$$= \boxed{6,51,000}$$

Q5 The number of laptops sold of brand H during April is approximately what % of the number of laptop sold of brand H during September?

(a) 110

(b) 140

(c) 130

(d) 150

sol

c

Explanation:

$$\underline{\text{April}} = 45000 \times \frac{17}{100} = 7650$$

$$7650 \times \frac{8}{15} = \underline{4080}$$

$$\underline{\text{September}} = 45000 \times \frac{16}{100} = 7200$$

$$7200 \times \frac{7}{16} = \underline{3150}$$

$$= \frac{4080}{3150} = \boxed{130}$$