GATEWAY CLASSES
Empowering learners, transforming futures

DPP-1 Maths - IV Unit - 3

Topic - Overview of Measures of Central tendency

Q-1: Find the mean for the following individual series.

x	3	6	8	10	18

Sol - $x_1 = 3$
$x_2 = 6$
$x_3 = 8$
$x_4 = 10$
$x_5 = 18$

$$\bar{x} = \frac{\Sigma x}{n}$$

$$\bar{x} = \frac{3+6+8+10+18}{5}$$

$$\bar{x} = \frac{45}{5}$$

$$\boxed{\bar{x} = 9}$$

Q-2: Find the mean of the following frequency distribution.

x	0	1	2	3	4	5	6	7
f	1	8	28	56	70	56	28	8

Gateway Classes

Download Our App from Google PlayStore
Helpline Number : 7455961284
PDF Notes PYQs Solution Recorded Lectures

x	f	$f \cdot x$
0	1	0
1	8	8
2	28	56
3	56	168
4	70	280
5	56	280
6	28	168
7	8	56
	$\Sigma f = 255$	$\Sigma f \cdot x = 1016$

By Direct Method :- $\bar{x} = \frac{\Sigma f x}{\Sigma f}$

$$\bar{x} = \frac{1016}{255}$$

$$\boxed{\bar{x} = 3.98}$$

Ans.

Q-3 :- Find the mean of the following frequency distribution

Marks	0-10	10-20	20-30	30-40	40-50
No. of Students	5	10	40	20	25

GatWay Classes

Download Our App from Google PlayStore
Helpline Number : 7455961284
PDF Notes
PYQs Solution
Recorded Lectures

GATEWAY CLASSES
Empowering learners, transforming futures

Marks	No. of students	Mid value (x)	$u = \frac{x-A}{h}$	fu
0-10	5	5	-2	-10
10-20	10	15	-1	-10
20-30	40	25 (A)	0	0
30-40	20	35	1	20
40-50	25	45	2	50

$\Sigma f = 100$ $\Sigma fu = 50$

By step deviation Method -

$$\bar{x} = A + h \times \frac{\Sigma fu}{\Sigma f}$$

$$\bar{x} = 25 + 10 \times \frac{50}{100}$$

$$\boxed{\bar{x} = 30}$$

Ans.

Gateway Classes

Download Our App from Google PlayStore
Helpline Number : 7455961284
PDF Notes PYQs Solution Recorded Lectures