1. Find arithmetic mean for the following data:

| a. Age in year : |  | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No. of person : | 5 | 15 | 15 | 20 | 8 | 4 |  |

b. $34,78,12,90,54,34,40$
$\begin{array}{llllllll}\text { c. } & \mathrm{X} & : & 5 & 10 & 15 & 20 & 25 \\ & \mathrm{~F} & : & 3 & 1 & 4 & 2 & 10\end{array}$
2. For 200 workers from factory A , the arithmetic mean and standard deviation of daily wages are 120 and 10 respectively. For 150 workers from factory B the corresponding figures are 100 and 20 respectively. Find the combined arithmetic mean and standard deviation of wages if both the groups are taken together.
3. Find the weighted mean for the given data:

| X | $:$ | 28 | 29 | 25 | 32 | 40 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| W | $:$ | 3 | 7 | 4 | 5 | 2 |

4. The mean of 16 items was found to be 30 . On rechecking, it was found that one item was wrongly taken as 22 instead of 32 . Find the correct mean.
5. Calculate Mode for the following data.
a. $12,34,11,45,23,12,20,11,12,23,12$
b. C.I
120-125 125-130 130-135
135-140 140-145
145-150
f
7
10
18
20
12
7
6. Find the median for the following data:
a. $2,9,7,3,4,12,5,6,8,2$
b. $12,45,23,9,12,7,1$

| c. Class interval | $0-5$ | $5-10$ | $10-15$ | $15-20$ | $20-25$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| frequency | 15 | 23 | 25 | 22 | 10 |


| d. Marks | $0-9$ | $10-19$ | $20-29$ | $30-39$ | $40-49$ | $50-59$ |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| No. of student | 12 | 18 | 30 | 20 | 15 | 5 |

## Topic: Measures of Central Tendency

7. Prepare the cumulative frequency table of
a) Less than type,
b) Greater than type,

For the following frequency distribution of 100 workers.

| Age in year | $20-25$ | $25-30$ | $30-35$ | $35-40$ | $40-45$ | $45-50$ | $50-55$ | $55-60$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of worker | 3 | 9 | 15 | 25 | 23 | 12 | 10 | 3 |

Also state how many workers are?
(a) Less than or equal to 40 year?
(b) Greater than or equal to 50 year?
8. Draw histogram and locate the mode.

| Sales in 000's | $80-90$ | $90-100$ | $100-105$ | $105-110$ | $110-120$ | $120-130$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No of companies | 110 | 125 | 145 | 143 | 100 | 96 |

9. The following data give the fine paid by the defaulters in a particular class.

Draw Histogram and hence find mode.

| Fine paid | $20-40$ | $40-60$ | $60-80$ | $80-100$ | $10-120$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Defaulters | 7 | 22 | 40 | 38 | 21 |

10. Draw o-give curve for the following data and hence locate the quartile.

| Daily wages | $20-40$ | $40-60$ | $60-80$ | $80-100$ | $100-120$ | $120-140$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No of worker | 7 | 12 | 16 | 13 | 10 | 4 |

11. Find the missing term for the given data where $A M$ is 33.5 .
C.I
0-10
F
4
10-20
16
20-30
60
30-40
?
40-50
40
12. Find the missing term for the given data where median is 46
C.I :
F
10-20
20-30
30-40
40-50
50-60
12
19
13. Find the missing term for the given data where mode is 320

| C.I | $:$ | $100-300$ | $300-500$ | $500-700$ | $700-900$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| F | $:$ | 23 | 30 | $?$ | 20 |

[^0]
[^0]:    Miss. Aayesha Ansari
    Assistant Professor (Mathematics)

