

FORMATIVE ASSESSMENT – THIRD MID TERM

MATHEMATICS

Max. Marks: 50

Std - VIII

Time: 1½ Hrs

|                     |                      |
|---------------------|----------------------|
| Name of the School: | Name of the Student: |
| Place:              | Roll No.:            |

I. Choose the correct answer: 5 x 1 = 5

1. Mean = (Sum of observations)?

a) Product of observationsb) Smallest observation

c) Number of observationsd) Percentage of observations
2. The middle number in a data is called as \_\_\_\_\_.

a) Meanb) Mediang) Moded) Average
3.  $1088 \div 20$  is equal to \_\_\_\_\_.

a) 58.4b) 56.4c) 54.4d) 55.4
4.  $\frac{22500}{15} =$  \_\_\_\_\_.

a) 4500b) 3500c) 2500d) 1500
5. Find the median in the data 43, 37, 34, 35, 41, 28, 33, 35, 18, 24

a) 35.5b) 34.5c) 36.5d) 33.5

II. Fill in the blanks: 5 x 1 = 5

6.  $\frac{169}{50}$  is equal to \_\_\_\_\_.
7. \_\_\_\_\_ is the observation that occurs most frequently in the set of given observations.
8.  $\frac{100}{15} \times x = 1260$ ,  $x =$  \_\_\_\_\_.
9.  $\frac{700 + 750}{2} =$  \_\_\_\_\_.
10. A \_\_\_\_\_ is a circular chart in which the circle is divided into sectors.

III. Do as directed. (Any 5) 5 x 3 = 15

11. Construct a histogram for the following data.

|                |         |         |         |         |         |         |
|----------------|---------|---------|---------|---------|---------|---------|
| Class interval | 10 – 15 | 15 – 20 | 20 – 25 | 25 – 30 | 30 – 35 | 35 – 40 |
| Frequency      | 30      | 90      | 80      | 50      | 20      | 50      |

12. The total mass of 6 foot ball players is 360 kg and the mean of another 14 players is 52 kg. Find the mean of 20 players.
13. Find the mean, median and mode, 7, 21, 2, 17, 13, 3, 7, 4, 9, 7, 9.
14. The mean of 5 numbers is 11. The numbers are in the ratio 1:2:3:4:5. Find the smallest number.
15. Define median, and write the formula if n is odd and n is even.
16. Monthly expenditure of kumarans family is given below. Draw a suitable pie chart.

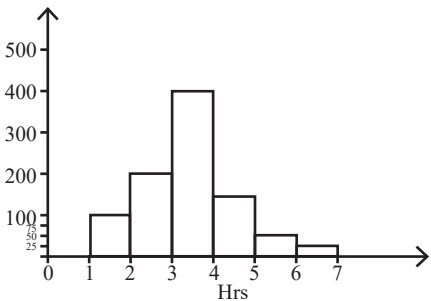
|                 |      |           |      |           |          |
|-----------------|------|-----------|------|-----------|----------|
| Particulars     | Food | Exucation | Rent | Transport | Machines |
| Expenses (in %) | 50%  | 20%       | 15%  | 5%        | 10%      |

17. Four numbers have a mean as 7.5, and mode as 6 and median as 7. Find the numbers.
18. Define frequency polygon with an example.

IV. Answer the following. (Any 5)

5 x 5 = 25

19. In a village, there are 570 people who have cell phones. An NGO surveyed their cell phone usage. Based an this survey, a histogram is drawn. Answer the following ques-tions.
- a) How many people use cell phone for less than 3 hours?
- b) How many people use cell phone for more than 5 hours?



20. Out of 100, Farida scored 84, 90, 92, 86 in four subjects. What is her score in the fifth subject if her mean score in the five subject is 89?
21. The average of 10 numbers was found to be 180. One of the numbers 176 was wrongly counted as 167. Find the original mean.
22. The table gives the information on the percentage of tourist who visited different places in December. Construct a pie chart for the data.

| States        | Delhi | MP | Assam | Rajasthan | Punjab |
|---------------|-------|----|-------|-----------|--------|
| % of tourists | 40    | 20 | 5     | 10        | 25     |

23. a) Find the mode for the data.13, 15, 17, 14, 17, 17, 13, 13, 15, 16 and 17.
- b) The mean of three numbers is 7 one of the numbers is 9. The mode is the same as the median. Find the other two numbers.
24. The ages in years of 10 volley ball players of a school are 14, 14, 15, 13, 15, 14, 13, 15, 13 and 14. Find the Mean, Median, Mode.