

SUBJECT: MATHEMATICS  
STD-IX  
TOPIC- STATISTICS  
ASSIGNMENT (BASIC)

**From the given four options chose the correct answer.**

1. Class mark of class 150 – 160 is \_\_\_\_\_
  - (a) 150
  - (b) 160
  - (c) 155
  - (d) none of these.
2. Average of numbers: 10, 8, 9, 7, 8 is \_\_\_\_\_
  - (a) 8.4
  - (b) 7.4
  - (c) 4.8
  - (d) 8.2.
3. Mean of first 10 natural numbers is \_\_\_\_\_
  - (a) 6.5
  - (b) 5.5
  - (c) 7.5
  - (d) 8.5.
4. The heights (in cm) of 9 students of a class are as follows: 155, 160, 145, 149, 150, 147, 152, 144, 148 Find the median of this data.
  - (a) 150
  - (b) 147
  - (c) 149
  - (d) 148
5. The points scored by a Kabaddi team in a series of matches are as follows 17, 2, 7, 27, 15, 5, 14, 8, 10, 24, 48, 10, 8, 7, 18, 28. Find the median of the points scored by the team.
  - (a) 12
  - (b) 15
  - (c) 24
  - (d) 28
6. Find the mode of the following marks (out of 10) obtained by 20 students: 4, 6, 5, 9, 3, 2, 7, 7, 6, 5, 4, 9, 10, 10, 3, 4, 7, 6, 9, 9
  - (a) 4
  - (b) 7
  - (c) 10
  - (d) 9
7. Class mark of class 150 – 160 is \_\_\_\_\_
  - (a) 150
  - (b) 160
  - (c) 155

(d) none of these.

8. The median of the data 78, 56, 22, 34, 45, 54, 39, 68, 54, 84 is \_\_\_\_\_  
(a) 45  
(b) 49.5  
(c) 54  
(d) 56
9. For drawing a frequency polygon of a continuous frequency distribution, we plot the points whose ordinates are the frequency of the respective classes and abscissa re respectively  
(a) upper limits of the classes  
(b) lower limits of the classes  
(c) class marks of the classes  
(d) upper limits of preceding classes.
10. The class marks of a frequency distribution are given as follows: 15, 20, 25, ..... The class corresponding to the class mark 20 is  
(a) 12.5 – 17.5  
(b) 17.5 – 22.5  
(c) 22.5 – 27.5  
(d) 27.5 – 32.5

**Answer the following questions.**

11. For what value of  $x$ , is the mode of the following data is 17? 15, 16, 17, 14, 17, 16, 13,  $x$ , 17, 16, 15, 15
12. Find the median of first sixteen odd numbers.
13. Find the median of first ten prime numbers.
14. A school has two sections. The mean mark of one section of size 40 is 60 and mean mark of other section of size 60 is 80. Find the combined mean of all the students of the school.
15. The median of the following observations arranged in ascending order 8, 9, 12, 18,  $(x + 2)$ ,  $(x + 4)$ , 30, 31, 34, 39 is 24. Find  $x$ .
16. The mean weight of 180 students in a school is 50kg. The mean weight of boys is 60kg while that of the girls is 45kg. Find the number of the boys and girls in the school.
17. The marks secured by 15 students are 70, 55, 95, 62, 82, 65, 60, 68, 75, 58, 64, 85, 80, 90, 51. Find the median marks.
18. If the mean of  $2x + 3$ ,  $3x + 4$ ,  $x + 7$ ,  $x - 3$ ,  $4x - 7$  is 14. Find the value of  $x$ .
19. The mean of 8 numbers is 15. If each number is multiplied by 2, what will be the new mean?
20. Find the median of the following data: 33, 31, 48, 45, 41, 92, 78, 51, and 61. If 92 is replaced by 29, what will be the new median?
21. The mean of 9 numbers is 50. If one number is included, their mean becomes 55. Find the included number.

22. Find the median of the following data 15,28,72,56,44,32,31,43 and 51. If 32 is replaced by 23, find the new median.

23. Draw a histogram of the following data.

Class	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	5	10	13	9	6	2

24. Thirty children spent about the number of hours they watched TV programmes in the previous week. The result was as follow:

1	2	10	10	8	4
10	2	5	8	9	8
3	4	5	6	1	4
6	8	2	5	8	6
3	3	9	10	4	8

(i) Prepare a frequency table for the given data.

(ii) Find the mode of the data.

25. **The daily minimum questions solved by a student during a week were as under:**

<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>	<b>Saturday</b>
<b>35</b>	<b>30</b>	<b>27</b>	<b>32</b>	<b>23</b>	<b>28</b>

**Find the mean questions.**

26. The blood groups of 30 students of Class VIII are recorded as follows: A, B, O, O, AB, O, A, O, B, A, O, B, A, O, O, A, AB, O, A, A, O, O, AB, B, A, O, B, A, B, O. Represent this data in the form of a frequency distribution table. Which is the most common, and which is the rarest, blood group among these students?

27. **Say the statement are true or false.**

Two sections of Class XII having 30 students each appeared for Science Olympiad. The marks obtained by them are shown below:

46 31 74 68 42 54 14 61 83 48 37 26 8 64 57

93 72 53 59 38 16 88 75 56 46 66 45 61 54 27

27 44 63 58 43 81 64 67 36 49 50 76 38 47 55

77 62 53 40 71 60 58 45 42 34 46 40 59 42 29

Student having Marks above 80 are exceptional

Student obtaining below 30 marks are failed

(a) The no of student who scored more than 89 marks is 2

(b) The number who scored, marks between 50-69 is 22

(c) The number of student who scored more than 49 marks is 32

(d) The range of the marks is 85

(e) The no of exceptional students are 4

(f) Student who failed in the test are 7

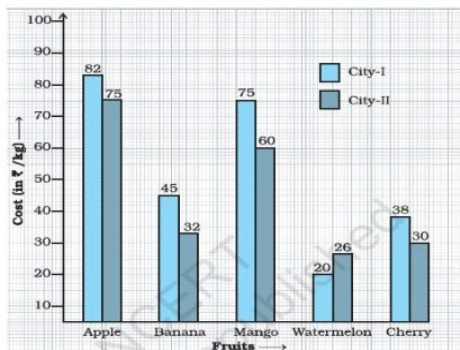
28. A family with a monthly income of Rs. 20,000 had planned the following expenditure per month under various heads.

Heads	Expenditure (in thousand rupees)
Grocery	4
Rent	5
Education	5
Medicine	2
Fuel	2
Entertainment	1
Miscellaneous	1

29. Draw a bar graph of the following data.

Product	A	B	C	D	E	F
Number of consumers	152	136	180	165	126	152

30. Study the double bar graph given below and answer the questions that follow:-



- What information does the above double graph depict?
- Name the fruits for which cost of 1 kg is greater in City I as compared to City II.
- What is the difference of rates for apples in both the cities?
- Find the ratio of the cost of mangoes per kg in City I to the cost of mangoes per Kg in City II.