

**Y-11-Y**

Roll No

Total No. of Questions 26]

[Total No of Printed Pages 7

**XIARJKUT23**

**9211-Y**

**STATISTICS**

Time : 3.00 Hours]

[Maximum Marks : 70

**General Instructions :**

- a) All questions are compulsory.
- (b) The question paper contains 26 questions.
- (c) Questions 1-5 in Section-A are Objective Type Questions carrying 1 mark each.
- (d) Questions 6-10 in Section-B are Very Short Answer Type Questions-I, carrying 2 marks each.
- (e) Questions 11-22 in Section-C are Very Short Answer Type Questions-II, carrying 3 marks each.
- (f) Question 23 in Section-D is a Short Answer Type Question, carrying 4 marks.
- (g) Questions 24-26 in Section-E are Long Answer Type Questions, carrying 5 marks each.

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Turn Over

**Section-A****(Objective Type Questions)**

1 each

1. If arithmetic mean is '10' and the no. of observations are 200, then sum of all the values is :
 

(A) 2	(B) 20
(C) 15	(D) None of these
2. If  $r_2$  or  $\beta_2 - 3$  is zero, then the curve is :
 

(A) Platykurtic	(B) Mesokurtic
(C) Laptokurtic	(D) None of these
3. The second moment about central mean is always :
 

(A) Mean	(B) Zero
(C) Variance	(D) Median
4. Correlation coefficient can be maximum upto :
 

(A) 2	(B) 1
(C) -1	(D) Zero

5. Hard disc is an :

(A) Input Device

(B) Output Device

(C) None of these

(D) Both (A) and (B)

**Section-B**

**(Very Short Answer Type Questions-I)**

2 each

6. What are the advantages of a graph ?

*Or*

Define briefly an Ogive Curve.

7. What do you mean by Deciles ?

8. Define Coefficient of Variation.

9. What do you mean by Central Moments ?

10. What is meant by Bivariate Data ?

**Section-C**

**(Very Short Answer Type Questions-II)**

3 each

11. Give the scope of Statistics.

Or

What do you mean by Quantitative Data ?

12. What are the sources of Secondary Data ?
13. What are the methods of Data Collection ?
14. What do you mean by Discrete and Continuous Data ?
15. What is Combined Mean ?
16. What do you understand by Symmetrical and Asymmetrical Data ?
17. Define Percentiles.
18. What are the absolute measures of Dispersion ?
19. Calculate S.D. for the following Data :

Class Interval	Frequency
0—10	5
10—20	2
20—30	3
30—40	7
40—50	3

20. What is Bowley's measure of Skewness ?
21. What is the moment based measure of Skewness ?
22. For the following data, calculate first two moments about actual mean :

X	55	65	75	85	95
f	2	3	5	3	2

### Section-D

#### (Short Answer Type Questions)

4

23. Obtain the median for the following frequency distribution :

X	1	2	3	4	5	6	7	8	9
f	8	10	11	16	20	25	15	9	6

Or

What is Central Tendency and its measures ?

**Section-E****(Long Answer Type Questions)**

5 each

24. What is a Bar Chart ? Represent the following data by a bar diagram :

Year	Income (in ₹)
2015-16	22
2016-17	25
2017-18	27
2018-19	30

*Or*

Draw a Histogram from the following data :

Class Interval	Frequency
0—10	2
10—20	5
20—30	7
30—40	5
40—50	2

( 7 )

25. Give the concept of correlation and its types.

Or

Show that correlation coefficient is independent of change of origin as well as scale.

26. Write the concept of Flow Charts.

Or

What are the functional components of a Computer ?