# THREE YEAR B.A./B.Sc DEGREE EXAMINATION <br> STATISTICS(WM) <br> (W.E.F 2020-21 ADMITTED BATCH) <br> SEMESTER - I <br> PAPER 1: DESCRIPTIVE STATISTICS 

## Time: 3 Hours

Max. Marks :75
SECTION - A

## Answer any FIVE Questions :-

$5 \times 5=25 M$

1. Define Primary and Secondary data
2. Define mean and explain merits and demerits
3. Explain sheppard corrections for moments
4. Define Skewness? Mention various measures of Skewness?
5. Explain the Method of Fitting of Power Curve
6. Define Multiple \& Partial Correlation Coefficients
7. Define Regression Coefficients? Mention the Properties.
8. What are the differences between Correlation \& Regression?
9. What are the Conditions of Consistency of Two Attributes data.
10. Explain Independence of Attributes .

## SECTION - B

## Answer any FIVE questions :- <br> $5 \times 10=50 \mathrm{M}$

11. Explain various measures of Central tendency.
12. Find Mean, Median for the following data

| C. | $0-$ | $20-$ | $40-$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| I | 2 | 40 | $60-$ | $80-$ <br> 10 <br> 0 |  |

13. Explain various measures of dispersion. State their merits and demerits.
14. Define central, non-central moments. Derive central moments in terms of raw moments.
15. Explain Fitting of a Second degree Parabola by Least Squares Method: Fit Parabola for the following data.

| X | 196 | 197 | 198 | 199 | 200 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 0 | 0 | 0 | 0 |
| Y | 20 | 35 | 55 | 80 | 115 |

16. Define Karl Pearson Correlation Coefficient. State and prove the Properties of Correlation Coefficient
17. Derive regression line of Y on X .
18. The equations of the two regression lines are $8 x-10 y+66=0,40 x-18 y+214=0$ and $\mathrm{v}(\mathrm{x})=9$, then find (a) Correlation Coefficient (b)S.D of y
19. Explain Yules Coefficient of Assocciation and Colligation and Show that $\mathrm{Q}=2 \mathrm{Y} /\left(1+\mathrm{Y}^{2}\right)$
20. Explain Various Coefficients of Contingency.
