## B. Sc. DEGREE EXAMINATION, NOVEMBER 2019

PSYCHOLOGY
THIRD SEMESTER
COURSE : MAJOR - CORE
PAPER : STATISTICS PSYCHOLOGY - I
TIME : 3 HOURS
MAX.MARKS:100

## SECTION - A

## I. ANSWER ALL QUESTIONS. EACH ANSWER NOT TO EXCEED 50 WORDS.

(10x2=20)

1. Define statistics.
2. What is bar graph?
3. Define central tendency.
4. Define variability.
5. What is skewness?
6. List our the inferential statistical methods.
7. What are discrete and continuous variables?
8. What are the assumptions of Mode?
9. Interpret the correlation coefficient value of 0.81 .
10. What is kurtosis?
SECTION - B

## II. ANSWER ANY FIVE QUESTIONS. EACH ANSWER NOT TO EXCEED 250 WORDS.

11. Ten competitors in a beauty contest are ranked by three judges in the following order.

| $1^{\text {st }}$ Judge | 1 | 6 | 5 | 10 | 3 | 2 | 4 | 9 | 7 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2^{\text {nd }}$ Judge | 3 | 5 | 8 | 4 | 7 | 10 | 2 | 1 | 6 | 9 |
| $3^{\text {rd }}$ Judge | 6 | 4 | 9 | 8 | 1 | 2 | 3 | 10 | 5 | 7 |

Use the rank correlation co-efficient to determine which pair of judge has the nearest approach to common tastes in beauty
12. Discuss the functions of statistics.
13. What are the merits and demerits of mean and median?
14. Define correlation and list out its types.
15. Explain the descriptive statistical methods.
16. Compute mean and median and mode for the following data

| Scores | $70-71$ | $68-69$ | $66-67$ | $64-65$ | $62-63$ | $60-61$ | $58-59$ | $56-57$ | $54-55$ | $52-53$ | $50-51$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F | 2 | 2 | 3 | 4 | 6 | 7 | 5 | 1 | 2 | 3 | 1 |

17. Point out the situations in which average deviation and standard deviation are used.
18. Calculate standard deviation and co-efficient of variation from the following.

| Wages | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ | $70-80$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No. of <br> workers | 12 | 18 | 35 | 42 | 50 | 45 | 20 | 8 |

## SECTION - C

## III. ANSWER ANY TWO QUESTIONS. EACH ANSWER NOT TO EXCEED 1200 WORDS.

19. Elucidate the need and importance of statistics in psychology.
20. Compute Average deviation and standard deviation from the following data

| Scores | $80-84$ | $85-89$ | $90-94$ | $95-99$ | $100-104$ | $105-109$ | $110-114$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| F | 4 | 4 | 3 | 0 | 3 | 3 | 1 |

21. Find the correlation coefficient between the following scores (Normally distributed) and interpret the results.

| Subjects | Test -X | Test - Y |
| :---: | :---: | :---: |
| A | 15 | 40 |
| B | 18 | 42 |
| C | 22 | 50 |
| D | 17 | 45 |
| E | 19 | 43 |
| F | 20 | 46 |
| G | 16 | 41 |
| H | 21 | 41 |

22. Enumerate the characteristics of normal curve
