## STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086 (For candidates admitted during the academic year 2016 -2017 & thereafter)

**SUBJECT CODE: 16PY/MC/ST34** 

# 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. (5x8=40)

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

1 <sup>st</sup> Judge	1	6	5	10	3	2	4	9	7	8
2 <sup>nd</sup> Judge	3	5	8	4	7	10	2	1	6	9
3 <sup>rd</sup> 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	12	18	35	42	50	45	20	8
workers								

#### **SECTION - C**

### III. ANSWER ANY TWO QUESTIONS. EACH ANSWER NOT TO EXCEED 1200 WORDS. (2x20=40)

- 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
В	18	42
C	22	50
D	17	45
E	19	43
F	20	46
G	16	41
Н	21	41

22. Enumerate the characteristics of normal curve

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