

QP Code : U24A022

Reg. No :

Name :

ST MARY'S COLLEGE (AUTONOMOUS), THRISSUR-20

**I SEMESTER B A/B Sc /B Com/BBA/BCA/BSW (FYUGP) DEGREE EXAMINATION,
November 2024**

STA1FM105-(2) : Fundamentals of Statistics

2024 Admission Onwards

(Credits: 3)

Time : 1.5 Hours

Maximum Marks : 50

Section A

[Answer All. Each question carries 2 Marks] (Ceiling: 16 Marks)

1. What are the different methods of studying a population? [BTL3]
2. What is primary data? [BTL1]
3. Identify the type of data in the following cases [BTL3]
 - i) No of Children in 25 families
 - ii) Age of 200 students in a college
4. Draw up a blank table to show the number of candidates appearing in the first year, second year and third year examinations of a university in Art, Science and Commerce stream. [BTL3]

5. Draw a suitable diagram for the following data [BTL4]

Year	1952	1957	1962	1967	1972	1977
No of women M.P's	22	27	34	31	22	19

6. Give any two merits of median. [BTL1]
7. What is the variance of a set of values with mean and coefficient of variation are respectively 20 and 60%? [BTL4]
8. Calculate the average speed of a car running at the rate of 15 Km.p.h during the first 30 km;at 20 k.m.p.h during the second 30 km;and at 25 kmph during the third 30 km. [BTL3]

9. Evaluate the quartiles for the following data. [BTL5]

Profit	1	2	4	6	7	9	10
No of Companies	20	23	17	10	5	3	1

10. Evaluate the skewness based on the given information [BTL5]
 $Q_1=142$, $Q_3=178$ and Median =160

Turn Over

Section B

[Answer **All**. Each question carries **6 Marks**] (Ceiling: 24 Marks)

11. What are the methods of collecting primary data? [BTL1]

12. Write a short note on [BTL1]
(i) frequency polygon
(ii) frequency curve

13. Calculate the mean deviation about mean for the following data [BTL4]

Classes	0-10	10-20	20-30	30-40	40-50
Frequency	5	15	17	11	2

14. Evaluate the mode for the following data [BTL5]

Class	0-10	10-20	20-30	30-40	40-50
Frequency	5	11	14	8	2

15. Define Partition values. What are the different types of partition values? Explain. [BTL1]

Section C

[Answer **any one**. Each question carries **10 Marks**] (1x10=10 Marks)

16. Draw a frequency polygon and frequency curve for the following data [BTL3]

Class	5-9	10-14	15-19	20-24	25-29	30-34
Frequency	8	18	27	21	10	6

17. Calculate the median and quartile deviation for the following data [BTL3]

Class	0-20	20-40	40-60	60-80	80-100
Frequency	8	21	35	31	5

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