STELLA MARIS COLLEGE (AUTNOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2011– 2012 & thereafter)

SUBJECT CODE: 11SC/MC/SS 44

B.A. DEGREE EXAMINATIONS, APRIL 2014
BRANCH III – SOCIOLOGY
FOURTH SEMESTER

COURSE	**:**	**MAJOR – CORE**
PAPER	**:**	**SOCIAL STATISTICS**
TIME	**:**	**3 HOURS**

MAX. MARKS: 100

SECTION – A
ANSWER ALL QUESTIONS. EACH ANSWER NOT TO EXCEED 50 WORDS
(10 x 2 = 20)

1. Define statistics.

2. What are the different types of classification of data?

3. In a survey of 20 students in a school, the number of students based on their age was recorded and the following data was obtained

   8 9 10 7 7 7 8 9 9 8 10 8 8 9 10 11

   Represent the data in the form of a discrete frequency distribution.

4. Define a class limit with an example

5. What is mid-point? Calculate the mid-point of 1000-1100.

6. List out the parts of a table.

7. The marks of 10 students are given below. Calculate the arithmetic mean.

   Marks : 50 75 88 64 40 32 45 61 95 70

8. What is mode? Calculate the model value of the following observation.

   34 35 36 34 35 34 34 35 37 34 35 36 35 36 37 34 35 34 36 34

9. The following are the prices of shares of XL Co.Ltd from Mondy to Saturday. Calculate the range and its co-efficient.

Day:	Mon	Tue	Wed	Thus	Fri	Sat
Price(Rs.)	200	220	308	160	150	310

10. What is regression?

SECTION - B

ANSWER ANY FIVE QUESTIONS. EACH ANSWER NOT TO EXCEED 300 WORDS: **(5 x 8 = 40)**

11. Explain the different types of tables.

12. Draw a multiple bar diagram from the following data

Year	2009	2010	2011	2012	2013
Sale (000'RS)	120	140	200	180	160
Profit (000'RS)	60	80	120	100	90
Advt Exp (000'RS)	5	7	12	8	6

13. Explain the relationship between mean median and mode.

14. Calculate the mean deviation and its coefficient for a income group of nine members.

    Wages (in RS): 3000 3800 4000 4200 4500 4900 5300 5700 6000

15. The data given below relates to the age of 20 couples. Form a two-way frequency table with class interval (20-23, 23-26 etc..) for the wife's age and 23-27, 27-31..) for the husband age.

No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Wife age	22	24	55	42	51	38	55	49	26	27	49	54	56	43	33	37	44	39	29	31
Hub age	29	26	61	46	58	42	60	55	32	37	49	59	64	49	39	44	49	46	34	37

16. Bring out the difference between correlation and regression.

17. Explain the four levels of measurement with suitable examples.

18. Define Social Statistics. Bring out the scope of statistics in social sciences.

SECTION – C

ANSWER ANY TWO QUESTIONS: **(2 x 20 = 40)**

19. Explain in detail the importance of social statistics in social research.

20. Construct the following diagrams:
Draw a percentage bar diagram and pie-diagrams for the following for the following data.

Items	Family A	Family B
Food	3000	4500
Rent	2500	3200
Education	5500	6400
Health	1400	2300
Transport	400	250
Electricity	800	400
Recreation	600	150

21. a) What is standard deviation? Bring out the difference between mean deviation and standard deviation
b) Calculate the mean and standard deviation of the following frequency distribution of marks :

Class Interval	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Marks	9	12	22	30	43	50	64

22. The following table gives the income and expenditure for 12 months. Using the Karl Pearson's co-efficient of correlation, calculate the co-efficient assuming Rs.43000 for income and Rs.35000 for expenditure as assumed mean.

Month	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec
Income (Rs'000)	31	32	41	40	49	53	54	48	37	42	45	51
Expenditure	29	30	39	35	42	51	50	46	33	41	38	44

Rs'000												

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