STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI - 86
(For Candidates admitted during the academic year 2011-2012 \& thereafter)
SUBJECT CODE: 11EC/AC/SE14

## B.A. DEGREE EXAMINATION NOVEMBER 2013 <br> BRANCH IV - ECONOMICS <br> FIRST SEMESTER

| COURSE | : ALLIED - CORE |
| :--- | :--- |
| PAPER | : STATISTICS FOR ECONOMICS - I |
| TIME | : 3 HOURS |
|  |  |

I. ANSWER ALL QUESTIONS:-

MAX.MARKS: 100
(10x2=20)

1. Explain any two characteristics of Statistics.
2. What is a Questionnaire?
3. What is Classification? What are the different types of Classification?
4. List out the types of Bar Diagrams.
5. Obtain the Median for the following data

$$
60,30,20,15,80,70
$$

6. When Mean is 50 and Median is 52 , calculate Mode?
7. Define Quartile Deviation
8. What is Kurtosis?
9. Calculate Index Number using Simple Aggregative method, when $\sum \mathrm{p}_{0}=600$ and $\sum \mathrm{p}_{1}=720$
10. What is Factor Reversal Test?

## SECTION-B

II. ANSWER ANY FIVE QUESTIONS :-
(5x8=40)
11. Explain the Random Sampling Methods.
12. What do you mean by Histogram? Draw a Histogram and Frequency Polygon from the following data

| Class | $30-40$ | $40-50$ | $50-60$ | $60-70$ | $70-80$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Frequency | 3 | 5 | 12 | 8 | 4 |

13. What do you know about Geometric Mean? Bring out its Merits and Demerits.
14. Define the Lorenz Curve and write the steps for drawing the Lorenz curve.
15. What is Standard Deviation? Calculate Standard Deviation from the following data

| Wages in Rupees | 10 | 20 | 30 | 40 | 50 | 60 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No. of Workers | 8 | 12 | 20 | 10 | 7 | 3 |

16. Describe the problems faced in the Construction of Index Numbers.
17. Calculate Consumer Price Index using Family Budget Method for 2012 on the basis of 2009 from the data given below

| Commodity | Weight | Price per Unit <br> 2009 | Price per Unit <br> 2012 |
| :---: | :---: | :---: | :---: |
| A | 20 | 8 | 10 |
| B | 15 | 4 | 40 |
| C | 10 | 3 | 2 |
| D | 5 | 7 | 8 |

## SECTION-C

## III. ANSWER ANY TWO QUESTIONS :-

$(2 \times 20=40)$
18. Explain the Primary Data and Secondary Data. Discuss the Various methods of collecting Primary Data and State merits and demerits of Primary data.
19. Compute Mean, Median and Mode for the following data

| Marks | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of Students | 4 | 6 | 10 | 20 | 6 | 4 |

20.Find Bowley's co-efficient of Skewness

| Class | $80-$ | $85-$ | $90-$ | $95-$ | $100-$ | $105-$ | $110-$ | $115-$ | $120-$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 85 | 90 | 95 | 100 | 105 | 110 | 115 | 120 | 125 |
| Frequency | 7 | 31 | 42 | 54 | 33 | 24 | 22 | 8 | 4 |

21. From the following data calculate Index Number of using a) Laspeyre's Method b) Paasche's Method and c) Fisher's Ideal method

| Commodity | 2005 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Price(Rs) | Quantity | Price(Rs) | Quantity |
| A | 5 | 2 | 6 | 2 |
| B | 4 | 4 | 6 | 5 |
| C | 3 | 5 | 4 | 8 |
| D | 12 | 6 | 15 | 12 |

