



**ELIZADE UNIVERSITY,  
ILARA-MOKIN, ONDO STATE  
FACULTY OF SOCIAL & MANAGEMENT SCIENCES**

**SECOND SEMESTER EXAMINATIONS**

**2018/2019 ACADEMIC SESSION**

**COURSE CODE: FSM 102**

**COURSE TITLE: INTRODUCTORY STATISTICS**

**DURATION: 2 HOURS.**

**INSTRUCTION: Attempt section A and any other two (2) questions in section B.**

**SECTION A**

1. Socio-economic status is an example of: (a). Numeric Data (b). Continuous Data (c). Categorical Data (d). Discrete Data (e). Ogive
2. Numerical quantity summarizing population is known as: (a). Statistics (b). Variable (c). Concept (d). Parameter (e). Model
3. My age is 34 years and Ade's age is  $25\frac{1}{2}$ . Age in this context is regard as (a). Discrete Data (b). Internal Data (c) Categorical Data (d). Non- Internal Data (e). Continuous Data
4. One of the followings is not an example of ordinal non-numeric data (a). Age group (b). Boxer's weight class (c). Income group (d). Sex (e). None of the above
5. The mean of 0.5, 1.5, 0.6, and x is 0.8. What is the value of x? (a) 0.60 (b). 1.40 (c). 1.50 (d). - 0.20 (e). - 0.42
6. One of the followings is not a graphical representation of data (a). Histogram (b). Cumulative frequency curve (c). Frequency polygon (d). Frequency distribution (e). Bar chart
7. Given that the mean of a distribution is 62, the mode is 52 and the standard deviation is 25. Calculate the coefficient of skewness (a). 0.2 (b). 0.4 (c). 0.6 (d). 0.8 (e). 0.3
8. Discrete data can assume values that are (a). Fractional (b). Decimal (c). None (d). Integers (e). Decimal / Integers
9. The Bernoulli, Binomial and Poisson distribution are (a). Ordinal data (b). Statistics (c). Continuous distribution (d). Normal and Ordinal distribution (e). Discrete distribution
10. Which of the following is a non- probability sampling? (a). Quota sampling (b). Cluster sampling (c). Systematic sampling (d). Multi-stage sampling (e). Random sampling
11. Find the upper quartile of 1,2,3,8,6,9,3,4,1,2,5 (a). 2 (b). 5.5 (c). 8 (d). 7 (e). 6
12. What is the mean absolute derivation of the data set; 7, 3, 12, 18? (a) 4 (b). 6 (c). 5 (d). 0 (e). 2
13. Harmonic mean is defined as (a). The arithmetic mean of the reciprocal of the data values (b). The reciprocal of the arithmetic mean of the reciprocals (c). The arithmetic mean of the reciprocal of the mean of the values (d). The reciprocals of the arithmetic mean of the data values (e). None of the above

14. The following numbers are the scores of GST 102 test: 18, 14, 20, 19, 7, 16, 11, 13, 23, and 17. Calculate the arithmetic mean. (a) 15.2 (b). 16.8 (c). 15.8 (d). 12.6 (e). 18.3
15. Find the geometric mean of 3, 6, and 12. (a) 2 (b). 7 (c). 8 (d). 9 (e). 6

(30 Marks)

### SECTION B

1. The following table shows the number of customers that patronise a small supermarket pack per day for a period of 45 consecutive days in 2016.

51 43 41 31 53 68 42 43 54 44 61 71 55 32 62 56 28 65 49 55 56 36  
38 57 45 85 75 46 34 78 59 47 51 52 33 53 54 48 64 66 61 41 42 58 59

a. Using the interval of the type 20 -29, 30 -39, etc., and the tally method, (i) construct a frequency table (ii). Construct a histogram (iii). Ogive (iv) Frequency polygon (v) Bar chart (5 Marks)

b. Using your result in (a) above, compute the (i) Mean, using the assumed mean (ii) Standard variation (iii) Coefficient of variation (iv) Third Quartile (Q3) (v) 50th Percentile (10 Marks)

2a. (i). Define data (1 Mark) (ii). Distinguish between numeric and non-numeric data (2 Marks) (iii). Distinguish between discrete data and continuous data (3 Marks).

b. Below is the annual turnover of the branches of nationwide distributor of many consumer goods

Turnover	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99
Branch of Supermarket	6	10	18	40	58	75	46	28	14	5

Compute (i). Mode (ii). Median (iii). Quartile Deviation (9 Marks).

3a. Briefly exhaustively discuss the following terms and give example of each

- i. Nominal scale (4 mark)
- ii. Ordinal scale (4 mark)
- iii. Interval scale (4 mark)

3b. Highlight three (3) properties of a good estimate known to you. (3 marks)