MBD-003-001112 Seat No. _____

B. Sc. (Sem. I) (CBCS) Examination

November / December – 2016

Statistics : Paper - 101

(Old Course)

Faculty Code : 003

Subject Code : 001112

Time : $2\frac{1}{2}$ Hours] [Total Marks : **70**

Instructions : (1) Question 1 Carries 20 Marks.

(2) Question 2 and Que. 3 Carry 25 Marks each.

(3) Student allowed to use scientific calculator.

(4) Provide graph paper on Student's request.

1 Give the answer to following question : (Each 1 mark) **20**

(1) Classification of students according to the marks of the certain subject is _____.

(2) Whether classification is done first or tabulation?

(3) In an exclusive type distribution, the limits excluded are _____.

(4) A series showing the sets of all distinct values individually with their frequencies is known as _____.

(5) For the mid-values given: 25, 34, 43, 53, 61 and 70. The first class of the distribution is _____.

(6) In a histogram with equal class intervals, heights of bar are proportional to _____.

(7) Ogives for more than type and less than type distribution intersect at _____.

(8) State Sterg's rule is _____.

(9) When collected data is grouped with reference to time, is known as _____.

(10) The presentation of classified data in tabular form is _____.

(11) The _____ is the reference point for calculating the 'less than' cumulative frequency.

(12) In an inclusive series both the limits are _____.

(13) Caption stands for _____.

(14) A simple table contains data on two characteristics _____.

(15) The class length of a class is 15 and the mid-value of is 27.5, find the lower limit and upper limit of the class _____.

(16) Which type of diagram is a bar diagram?

(17) With the help of Histogram which measure central of tendency find?

(18) By default file name of Microsoft Office Excel 2007 is _____.

(19) Last row of the sheet in Microsoft Office Excel 2007 is _____,

(20) Last column of the sheet in Microsoft Office Excel 2007 is _____.

2 (A) Write the answer any **Three** : (Each 2 marks) **6**

(1) Define meaning of statistics in singular sense.

(2) Define population and give one illustration.

(3) Explain sample inquiry with example.

(4) Explain inclusive classes with illustration.

(5) Define classification with illustration.

(6) Construct frequency for the following data with class length is 4 :

–8, –7, 10, 12, 6, 4, 3, 0, 7, –4, –3, –2, 2, 3, 4, 7, 5, 6, 10, 12, –9, 13, 11, –10, –7, –1, 0, 5, 3, 2, 6, 10, –6, –4

(B) Write the answer any **Three** : (Each 3 marks) **9**

(1) Write limitation of statistics.

(2) Explain cumulative frequency term with example.

(3) Write the advantage of sample inquiry.

(4) Write the short note: Histogram diagram.

(5) The information regarding the monthly expenditure of two families is as follows. Present the data in divided bar diagram in term of percentages.

Monthly Expenditure	Food	Clothing	Education	Fuel	Rent	Other
Family A	540	180	192	120	108	60
Family B	450	300	240	240	150	120

(6) In a ledger of a company, the liabilities in the final balance sheet are as under. Present the data by suitable diagram.

Particular	Share capital	Deposits	Loan	Current liabilities	Total
Liabilities (Rs.)	6,00,000	4,00,000	2,00,000	2,40,000	14,40,000

(C) Write the answer any **Two** : (Each 5 marks) **10**

(1) Write difference between population inquiry and sample inquiry.

(2) Write the difference between data obtained by the method of questionnaire by post and by enumerators.

(3) Write the characteristics of an ideal questionnaire.

(4) Explain different types of classification.

(5) Explain Star network topology.

3 (A) Write the answer any **Three** : (Each 2 marks) **6**

(1) Define meaning of statistics in plural sense.

(2) Define sample and give one illustration.

(3) Explain population inquiry with example.

(4) Explain exclusive classes with illustration.

(5) Define frequency distribution. State its type.

(6) Define tabulation.

(B) Write the answer any **Three** : (Each 3 marks) **9**

(1) Explain discrete frequency distribution with example.

(2) Write the advantage of classification.

(3) Describe the method of frequency polygon with equal class length.

(4) Write the short note: Bar diagram.

(5) Draw a histogram of the following frequency distribution :

Class	20-25	25-30	30-40	40-60	60-90
Frequency	8	10	40	32	24

(6) In test of Mathematics and Statistics each of 10 marks, obtained by 50 students are given by the following bivariate data. Prepare a bivariate frequency distribution from the data:

(1,2)	(3,4)	(2,2)	(1,0)	(5,5)	(5,6)	(2,3)	(2,2)	(5,4)	(4,6)
(3,1)	(3,2)	(4,5)	(0,1)	(2,0)	(1,2)	(3,3)	(2,4)	(3,1)	(4,5)
(2,2)	(4,3)	(3,4)	(1,1)	(5,6)	(6,5)	(5,6)	(6,6)	(2,3)	(5,6)
(6,5)	(6,6)	(3,2)	(3,3)	(5,4)	(2,5)	(3,2)	(3,1)	(6,6)	(6,6)
(1,1)	(2,2)	(0,1)	(1,2)	(2,3)	(5,5)	(3,4)	(3,3)	(5,4)	(4,6)

(C) Write the answer any **Two** : (Each 5 marks) **10**

(1) Write the difference between primary and secondary data.

(2) State the name of the methods of collecting of primary data and explain any one.

(3) State the source of secondary data.

(4) Explain CPU of computer.

(5) Explain Bus network topology.