

**B.Sc. (Honours) Examination, 2018**  
**Semester-III (CBCS)**  
**Statistics**  
**Course : SECC-1**  
**(Statistical Data Analysis Using Software Packages)**

**Time : 2 Hours**

**Full Marks : 20**

Questions are of value as indicated in the margin

Answer **any four** questions from the following

1. What is a qualitative variable and quantitative variable? Determine if the data is qualitative or quantitative.

- (a) The average temperature of a particular city is 23 degrees C.
- (b) Determine if the number of hours a person spends in front of a computer will affect their eye sight.
- (c) A random survey was done to find out the average speed of cars on a highway.
- (d) A survey was done among elementary age children to discover their favorite fruit.
- (e) Number of items sold to a shopper. 1+1+1+1+1

2. Identify the string and numeric variables and also determine the measurement scale.

- (a) Name
- (b) Gender
- (c) Blood Pressure
- (d) Price
- (e) Responses(1=Good, 2=Better, 3=Best) 1+1+1+1+1

3. Draw a suitable diagram of the following data:

(5)

State	Procurement of rice
Panjab	5,486
Harhana	1,248
Tamilnadu	589
Andhra Pradesh	3,987
Uttar Pradesh	1,296
Others	1,654
All States	14,260

P.T.O.

(2)

4. The number of telephone calls received at an exchange per interval for 245 successive one minutes intervals are shown in the following frequency table. (5)

Number of calls	Frequency
0	14
1	21
3	25
4	43
5	51
5	40
6	39
7	12

Find the mean median and mode.

5. Generate 20 random numbers from Normal (4, 6) distribution and find  $P(X < 27.4)$ , when X follows Normal (4, 6) distribution. (5)
6. Let  $X_1 = (1, 1, 2)$ ,  $X_2 = (1, -2, 5)$  and  $X_3 = (2, 5, -3)$ . Combining these vectors by row and prepare a matrix A. Find the determinant of A. (5)
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