PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

B.Voc DEGREE EXAMINATION DECEMBER 2017

(Third Semester)

Branch - FOOD PROCESSING TECHNOLOGY

DATA ANALYTICS

Time: Three Hours ' Maximum: 75 Marks

SECTION-A (20 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10x2-20)

- 1 Define interview schedule.
- What is ogives?
- 3 Enlist the merits of mean.
- 4 Give the formula for calculating arithmetic mean by continuous series.
- 5 What is regression?
- 6 Give any two properties of correlation coefficient.
- What are type I and type II errors in tests of hypothesis?
- 8 Give the assumptions made for large sample significance test.
- 9 Define 'ANOVA\
- Mention any two characteristics of X^2 test.

SECTION - B (25 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks ($5 \times 5 = 25$)

11 a Explain about tabulation.

OR

b Describe the methods of collecting primary data.

12 a From the following table, find the median and the mode.

Income (Rs.): 100 -200 100-300 100-400 100-500 100-600 • No. of Person: 15 35 63 83 100

OR

- b Explain the purpose of measuring variation.
- 13 a Find the correlation coefficient of the following data:

.20 X: 20 23 8 29 14 11 11 17 17 Y: 30 35 23 33 26 2.2 21 31 33 36

b Differentiate correlation and regression.

14 a Explain student t-test.

OR

b Discuss the rationale of the tests of significance for large and small samples.

15 a Elaborate on experimental designs in ANOVA.

OR

b What are the applications of chi-square test?

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks $(3 \times 10 = 30)$

- What are the different types of graphs used in data presentation?
- Describe the desirable characteristics of an ideal measures of central tendency.
- 18 Compute rank correlation coefficient.

X : 17 14 12 13 10 15 11 16 Y: 9 15 10 14 16 11 17 12

Gain in weight of experimental animals fed two types of diets Dj and D_2 are given below. Test whether the diets differ significantly.

D, 25 32 30 24 29 D₂ 24 34 24 30 31 31

20 Perform ANOVA from the following data.

Processors			
1	2	3	4
1	2	3	4
4	8	6	8
5	5	7	8
6	7	ol	5

2-Z-Z END