

# Nagarjuna Degree College 38/36, Ramagondanahalli, Yelahanka Hobli, Reg. No. Bengaluru - 560 064.

## III Semester B.B.A Degree Examination, April - 2022

### **BUSINESS ADMINISTRATION**

**Business Data Analysis** 

(CBCS Scheme Freshers)

Paper: I

Time: 3 Hours

Maximum Marks: 70

Instructions to Candidates:

Answers should be written completely in Enlgish.

#### SECTION-A

- 1. Answer any five sub questions of the following. Each sub question carries 2 marks.  $(5\times2=10)$ 
  - a) What is Inferential statistics?
  - b) Give two examples of secondary data.
  - c) List out any two uses of percentage bar diagram.
  - d) Given n = 30,  $\sum xy = 244$ , variance of x and y are 15 and 18 respectively. Compute the coefficient of correlation.
  - e) If Y = 45 and Z = 48, calculate  $\overline{X}$ .
  - f) What is probability?
  - g) Name the types of Hypothesis.



#### SECTION - B

Answer any three of the following questions . Each question carries 5 marks.  $(3\times5=15)$ 

2. Prepare a bivariate frequency table from the data of 20 students.

Marks in Business Data: 10,10,11,11,12,12,12,12,13,13,13,14,14,14,14,14,14,15,15,15 Analysis

Marks in Accounting: 20,20,20,20,21,21,22,22,23,23,23,23,23,23,24,24,25,25,25,25

3. Two Judges were asked to rank eight contestants in a cooking competition, and the ranks are as follows

Contestants: A B C H D E F G Judge X: 1 3 2 7 5 6 4 8 Judge Y: 2 1 4 8 7 3 5 6

Calculate the rank co-efficient.

- 4. Given the following information,  $\overline{X} = 130$ ,  $\overline{y} = 134$ ,  $\sigma x = 5$ , Variance of Y= 24.5 and correlational co-efficient = 0.8. Calculate.
  - a) The two regression lines.
  - b) The likely estimate of x when y = 80 and of y when x = 50
- 5. A sample of 50 provided a sample mean of 14.2 with standard deviation of 5. Test the hypothesis that the population mean is 15 against the alternative that it is not equal to 15. The cutoff Z value at 0.05 level of significance is 1.96.

#### **SECTION - C**

Answer any three of the following questions. Each question carries 15 marks.  $(3\times15=45)$ 

6. Calculate mean and median from the following data.

More than: 10, 20, 30, 40, 50, 60, 70, 80

Frequency: 230, 206, 176, 136, 86, 46, 26, 6



7. Following are the runs scored by two Batsman A and B in 10 Matches. Find who is a better scorer and who is more consistent.

A: 111, 32, 10, 46, 92, 55, 17, 23, 75, 24

B: 107, 22, 50, 106, 23, 18, 95, 18, 66, 26

8. From the following data.

a) Calculate two regression lines

b) Estimate the value of x, when y = 74 and valve of y, when x = 46.

c) Compute the correlation co-efficient by using the two regression co-efficients.

X: 40, 48, 52, 68, 72

Y: 20, 24, 28, 36, 52

9. What is sampling? Briefly explain the different methods of sampling.