



AJEENKYA

D Y PATIL UNIVERSITY

End Term Examination (December 2019)

School: School of Management

Program: MBA(B&FS)

Course: Business Statistics

Course Code: COM502

Semester: I

Max Marks: 100

Duration (mins): 150

Section 1:

Answer any 1 out of given two questions for 15 marks.

Q1. Explain the concept of central tendency. Each method needs to be explained for measuring central tendency with 2 merits and 2 demerits. Formula must be explained for all type of data.

Or

Q2. Explain the concept of correlation and regression with application in business.

Section 2:

Solve any 4 questions for 15 marks each

Q. 1. Following distribution of marks of 100 students in the examination as following:

Marks Obtained (Less than)	10	20	30	40	50	60	70	80	90
No. of students	8	14	22	36	65	82	92	98	100

- Draw Histogram & Less than and more than Ogive.
- Calculate Mode and Median

Q. 2a. Calculate MD & S.D.

Wages (Rs)	410	340	300	450	500
Frequency	8	3	2	5	2

Q.2b. For given data below:

Class	10-20	20-30	30-40	40-50	50-60	60-70	70-80
F	9	10	11	7	4	8	1

1. Calculate Quartile Deviation and co-efficient of Quartile deviation
2. Calculate SD and Variance

Q3 For the following data

X	18	24	28	36	18	23
Y	8	14	16	08	30	30

1. Calculate the coefficient of correlation
2. Predict Y if $x=43$

Q4 Solve Following:

a. **A Factory has 2 Machines 'A' and 'B', 'A' producing 400 units and 'B' producing 600 units of total output. 10% items produced by 'A' are defective and 5% produced by 'B' are defective. If a defective are drawn randomly, what is the probability that it is produced by machine B.**

b. A Bag contain 20 White balls and 3 red balls. If two balls are drawn randomly, what is the chance that both are red or both are white in colour.

Q5 A sample of 1000 students were recorded. The mean of population was 56 & S.D was 12(Refer Normal Distributed Z table).

- a. Calculate the no. of respondents score between 50 to 70
- b. Calculate the no. of respondents score more than 35

Section 3:

Q.1. Short Note on any 5(Compulsory): 5marks each.

1. Application of Statistics in Business
2. Define the Term Sampling & Censes Study
3. Explain the Concept of Normal Distribution Curve
4. Discrete variable and Continues variable
5. Probability sampling and Non-Probability sampling
6. Parameters and Statistics
7. Descriptive statistics and Inferential statistics

*****ALL THE BEST*****