



Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) – 201306

**POST GRADUATE DIPLOMA IN MANAGEMENT (2019-21)
END TERM EXAMINATION (TERM -I)**

Subject Name: **Quantitative Technique for Managers**

Time: **02.00 hrs**

Sub. Code: **PG 04**

Max Marks: **50**

Note:

1. Writing anything except Roll Number on question paper will be deemed as an act of indulging in unfair means and action shall be taken as per rules.
2. All questions are compulsory in Section A, B & C. Section A carries 5 questions of 2 marks each, Section B carries 2 questions of 10 marks each and Section C carries 2 Case Studies of 10 marks each

SECTION - A

02×05 = 10 Marks

- Q. 1(A): What is stratified random sampling?
 Q. 1(B): If a coin is tossed twice what is the probability of getting two heads.
 Q. 1(C): What do you understand by Ogive?
 Q. 1(D): What is pie chart? Explain.
 Q. 1(E): What do you understand by business forecasting?

SECTION - B

10×02 = 20 Marks

Q. 2: Find the line of Regression for the following ages of husbands and wives at marriage.

Husband's age	23	27	28	28	29	30	31	33	35	36
Wife's age	18	20	22	27	21	29	27	29	28	29

- Q. 3(A): How probability sampling is different from non-probability sampling. Explain with suitable example.
 Q. 3(B): What do you understand by Null Hypothesis? Discuss all the steps under Hypothesis Testing.

SECTION - C

10×02 = 20 Marks

Q. 4: Case Study:

Particulars regarding income of two villages are given below:

	Village Naveli	Village Virpur
No. of households	650	525
Average income per household per month	950	990
Variance in income	100	81

- I. In which village is the variation in income greater?
- II. What is the total income of both the villages put together?
- III. What is average income of households in both villages put together?

Q. 5: Case Study:

2000 students appeared in an exam. Distribution of marks is assumed to be normal with mean $\mu=30$ and Standard Deviation=6.25. How many students are expected to get marks (i) Between 20 and 40 (ii) less than 35.