# G.L. Bajaj Institute of Management \& Research 

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

## POST GRADUATE DIPLOMA IN MANAGEMENT (2020-22) <br> MID TERM EXAMINATIONS (TERM - I) <br> Academic Session- 2020-21

| Subject: Quantitative Techniques in Management | Time: 01.30 hour |
| :--- | :--- |
| Subject Code: PG04 | Max Marks: 20 |

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 1 Case Study of 8 marks. Section B carries 3 questions of 2 marks each and Section C carries 2 questions of 3 marks each.

## SECTION A

$$
2 \text { * } 4 \text { Marks= } 8 \text { Marks }
$$

## Q. 1: Case Study:

An investor has Rs. 10 Lakh to invest. He decides to invest in different asset class. The amount of money that he proposes to invest and the corresponding return is given below:

| Asset Class | Amount to be invested (Rs) | Expected rate of return (\%) |
| :--- | :---: | :---: |
| Equity Shares | $2,50,000$ | 15 |
| Debt Mutual Fund | $1,50,000$ | 10 |
| Fixed Deposit in ICICI Bank | $4,00,000$ | 7 |
| Gold | $2,00,000$ | 12 |

a) What is Weighted Average Return (weighted arithmetic mean) that investor should expect by investing all his money?
b) Find out the Arithmetic Mean of the expected return. Why is arithmetic mean different from weighted mean from the above data? Explain.

## SECTION B

$$
3 \text { * } 2 \text { Marks= } 6 \text { Marks }
$$

Q. 2: Popcorns are sold in three sizes at Theatres - small, medium and large. Explain why the size of the Popcorns is an example of categorical variable?
Q.3: "Modern Businesses are data rich but information Poor." Explain highlighting importance of Statistics.
Q.4: Below data represent the overall miles per gallon (MPG) of 2016 SUV priced under Rs 20 lakh.

| 23 | 20 | 21 | 22 | 18 | 18 | 17 | 17 | 19 | 19 | 19 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 17 | 21 | 18 | 18 | 18 | 17 | 17 | 16 | 20 | 16 | 22 |

Compute the mean, median and mode.

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## SECTION C

2*3 Marks= 6 Marks
Q.5: Write short notes on the following:
a) Histograms
b) Pareto Charts
Q.6: How descriptive statistics is different from inferential statistics? Discuss.

