Roll No.

Total Pages : 03

MBA/M-20 13446 STATISTICS AND RESEARCH METHODOLOGY MBA/HM/205

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt compulsory Q. No. **1** and *four* other questions (*one* question from each Unit). All questions carry equal marks.

- 1. Briefly explain the following :
 - (a) Importance of statistics
 - (b) Merits and demerits of mode
 - (c) Random sampling
 - (d) Mutually exclusive events
 - (e) Pure research
 - (f) Research methodology
 - (g) Features of primary data
 - (h) Data analysis.

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Unit I

2.	Fi	nd	the	values	of arit	hmetic	mean,	media	n, Q ₃	and
	mode for the following distribution :									
	Х	:	5-15	15-25	25-35	35-45	45-55	55-65	65-75	
	f	:	8	18	30	45	24	16	9	

3. Differentiate between correlation and regression and highlight their significance in research. What are the properties of Karl Pearson's co-efficient of correlation ?

Unit II

- 4. What is the importance of sampling in research ? Out of 5000 persons, you have to choose a random sample of 250 persons. How would you choose the sample using lottery method ? Discuss in detail.
- 5. (a) 10 coins are tossed simultaneously. Find the probability of getting (i) at least 3 heads and (ii) 4 or 5 heads.
 - (b) A bag contains 6 red and 4 white balls. Two balls are drawn (without replacement). Find the probability of drawing (i) one ball of each colour, (ii) no red ball and (ii) no white ball.

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Unit III

- 6. Why should an organisation conduct research ? How is the problem for research identified ?
- 7. Explain the meaning and significance of research design. How do exploratory, descriptive and causal studies differ from each other ?

Unit IV

- 8. Discuss the sources, benefits and limitations of secondary data.
- **9.** What do you mean by interpretation of data ? Briefly describe the statistical tools used for interpretation of data.

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