Roll No.

Total No. of Pages: 03

Total No. of Questions: 10

# MBA / MBA(IB) (Sem-2)

# **BUSINESS ANALYTICS FOR DECISION MAKING**

Subject Code: MBA-201-18

M.Code: 76153

Date of Examination: 16-06-2023

Time: 3 Hrs. Max. Marks: 60

#### INSTRUCTIONS TO CANDIDATES:

- 1. SECTION-A contains EIGHT questions carrying TWO marks each and students has to attempt ALL questions.
- 2. SECTION-B consists of FOUR Subsections: Units-I, II, III & IV. Each Subsection contains TWO questions each carrying EIGHT marks each and student has to attempt any ONE question from each Subsection.
- 3. SECTION-C is COMPULSORY and consists of ONE Case Study carrying TWELVE marks.

## **SECTION-A**

## 1. Answer briefly:

- a) What are the limitations of secondary data?
- b) What is meant by to ulation of data?
- c) What is an externate hypothesis?
- d) What is a Type-2 error?
- e) What is multicollinearity?
- f) What is heteroscedasticity?
- g) What is time series analysis?
- h) What are non-linear equations?

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## **SECTION-B**

## UNIT-I

2. Why managers need to have knowledge of statistics for making relevant decisions. Explain by citing examples.

## 3. Write notes on:

- a) Applications and limitations of the non-probability method of sampling.
- b) Advantages and limitations of primary data collection process.

## UNIT-II

4. Discuss the need and procedure of formulating a hypothesis in statistical analysis. Explain by citing examples.

## 5. Write notes on:

- a) Applications of Z-test
- b) Applications of Chi-square test

## UNIT-III

- 6. Discuss the steps and methods of forecasting. Explain by citing examples.
- 7. Write notes on
  - a) Applications of forecasting
  - b) Applications of partial correlation.

## UNIT-IV

8. Discuss the methods and applications of time series in business decision-making. Explain by citing examples.

## 9. Write notes on:

- a) Splicing and deflation in index numbers
- b) Different trend analysis techniques.

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#### SECTION-C

10. A certain drug is claimed to be effective in cutting cold. In an experiment on 500 persons with cold, half of them were given the drug and half of them were given the sugar pills. The patients' reactions to the treatment are recorded as follows:

	Helped	Harmed	No effect	Total
Drug	150	30	70	250
Sugar pills	130	40	80	250
Total	280	70	150	500

On the basis of the data, can it be concluded that there is a significant difference in the effect of the drug and sugar pill at a 5 % level of significance? ( For degrees of freedom = 2, Table value = 5.99)



NOTE: Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.

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