Roll No. | | | | | | | | | | | |

Total No. of Pages : 03

Total No. of Questions : 17

MBA/MBA(IB) (2018 Batch) (Sem.–2)

BUSINESS ANALYTICS FOR DECISION MAKING

Subject Code : MBA-201-18

M.Code : 76153

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

Answer the following questions in 2-3 lines :

1. What is secondary data?
2. What is probability sampling?
3. Define standard error.
4. Define F-test.
5. Define partial correlation.
6. Define association of variables.
7. Define consistency.
8. Define time series analysis.

SECTION-B

UNIT-I

9. Compare various sampling techniques.

10. In a trip organized by a college there were 80 persons, each of whom paid Rs. 15.5 on an average. There were 60 students each of whom paid Rs. 16. Members of teaching staff were charged at higher rate. The number of servants were 6 (all males) and they were not charged anything. The number of ladies was 20% of the total of which one was lady staff member. Tabulate this information and calculate total contribution as well as contribution of staff per head.

UNIT-II

11. In a random sample of 1,200 persons from town A, 600 are found to be consumers of wheat. In a sample of 1,000 from town B, 600 are found to be consumers of wheat. Do these data reveal a significant difference between town A and town B, so far as the proportion of wheat consumption is concerned?

12. Discuss hypothesis testing in details.

UNIT-III

13. Calculate the correlation coefficient from the following data of marks obtained in physics (X) and chemistry (Y) :

X	49	60	58	47	49	33	65	43	46	67
Y	47	65	50	48	55	58	63	48	50	69

14. From the following data obtain in regression equation :

X	6	2	10	4	8
Y	9	11	5	8	7

UNIT-IV

15. Below are given the figures of production (in thousand quintals) of a sugar factory :

Year	1975	1977	1978	1979	1980	1981	1984
Production (thousand quintals)	77	88	94	85	91	98	90

a) Fit a straight line by the 'least square' method, and tabulate the trend.

b) Eliminate the trend, what components of the time series are thus left over?

c) What is the monthly increase in the production of sugar?

16. Write a short note on the index numbers.

SECTION-C

17. Solve the following case study :

The demand for electric power at N.Y. Edison over the past 7 years is shown in the following table, in megawatts. The firm wants to forecast next year's demand by fitting a straight-line trend to these data.

Year	1	2	3	4	5	6	7
Power demand	74	79	80	90	105	142	122

Question **:**

Estimate power demand in 8^{th} and 9^{th} year.

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.