Dr Amit Srivastava.

COURSE CODE: 17B1WHS733
COURSE NAME: BUSINESS ANALYTICS
COURSE CREDITS: 3

MAX. MARKS: 35

MAX. TIME: 2 Hrs

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

The question paper is divided into two sections. Section A is compulsory for all. In section B, different data files are to be used for Odd and Even roll number students. The file name for Odd and Even roll numbered students are T3 – ODD.xlsx and T3 – EVEN.xlsx respectively.

There are three active sheets for three different questions. Solve the questions in Excel and write the output and important steps in your answer sheet.

SECTION A

1. Write short notes on the following (50-100 words)   (CO2)   (3x3=9)
   a) Analytics issues and capabilities
   b) Measures of variability
   c) Components of predictive analytics

2. "Different types of data require different strategies of analysis". Discuss the statement with the help of different strategies associated with different data types.   (CO3)   (4)

3. A company is contemplating whether to produce a new product. If it decides to produce, it must either install a new division which needs a cash outlay of Rs 4,00,000/- or work overtime with overtime expenses of Rs 1,50,000/-. If the company decides to install a new division, it needs the approval of Govt. and the company feels that there is 70% chance of getting the approval. A market survey has revealed the following facts: (CO5)   (7)

Magnitude of Sales	Probability	Resulting Profit (in Rs lakhs)
High	0.45	15
Medium	0.30	7
Low	0.20	3
Nil	0.05	- 5

However, by resorting the overtime, the company will not be able in a position to meet the high magnitude of sales. It will be able to satisfy upto the level of medium magnitude only, even if high magnitude of sales results. Calculate optimum EMV and selected strategies by drawing decision tree.

SECTION B

4. As given in Sheet 1 of the data file T3 – Odd or T3 – Even   (CO4)   (5)

5. As given in Sheet 2 of the data file T3 – Odd or T3 – Even   (CO5)   (5)

6. As given in Sheet 3 of the data file T3 – Odd or T3 – Even   (CO5)   (5)