COURSE NO: MF F421   **COURSE TITLE: Supply Chain Management**

DATE: 29-09-2019   TIME: 9:00AM-10:30AM   MAXIMUM MARKS: 30

Answer all questions

1. Discuss in detail about key supply chain decision phases and explain the significance of each.   .   [5 Marks]

2. Discuss how Wall Mart achieves strategic fit between competitive strategy and supply chain   strategy using supply chain drivers.   [5 Marks]

3. Explain different strategies that may be used to mitigate risk in global supply chain   [6 Marks]

4. How do the location and size of warehouses affect the performance of a firm such as Amazon? What factors should Amazon take into account when deciding where and how big its warehouses should be?   [4 Marks]

5. Blue Star Inc. is a manufacturer of air conditioner that has seen its demand grows significantly. The company anticipates nationwide demand for the year 2017 to be 18,000 units in the south, 12,000 units in west, 11,000 units in east and 11,000 units in North. Managers at Blue Star are designing manufacturing network and have selected four potential sites- Bhuvaneswar, Chennai, Pune and Noida. Plants have a capacity of 18000 units each. The annual fixed cost at the four locations are given in Table 1, along with the cost of producing and shipping a unit to each pair of four markets.

	Bhuvaneswar	Chennai	Pune	Noida
Annual fixed cost	Rs 60,00,000	Rs 50,00,000	Rs 45,00,000	Rs 65,00,000
East	21000	23000	24000	29000
South	23000	21000	23000	28000
West	24000	23000	21000	27000
North	30000	28000	27000	22000

Formulate above problem as a linear programming problem in terms of objective function and constraints   [5 Marks]

6.   Develop a forecast for the following data using simple exponential smoothing with an
      alpha of 0.66. Then calculate MAD, MSE.   [5 Marks]

Period	Demand
1	173
2	177
3	180
4	151
5	168
6	184
7	198
8	191
9	167
10	177

***********************************THE END***********************************