K J Somaiya Institute of Management Studies and Research Operations Planning & Control PGDM (Operations) and MMS (Operations) 2017 - 19 – TRIMESTER IV

Marks: 50 Time: 3 Hours 28th September 2018

1) Write short notes on:

(15)

- a) How does an Organization take decisions on Make vs Buy? Illustrate your reasoning taking an example of any FMCG company.
- b) Factors to be taken into consideration while selecting a machine or process for the Organisation. Explain with example from any industry of your choice.
- c) Explain in detail some of the new emerging technologies which could make the traditional OPC process redundant in future.
- 2) Explain the features, merits and demerits of FMS (10)
- 3) You have been given charge by the Head Office of a bank to locate an appropriate location for a new branch. State in detail how you would go about it and what factors you would take into account in the process of identifying the most suitable location. (10)
- 4) An ABC Analysis was conducted in a Company and an important item viz the pressure regulator was identified as category A and other items as category B and C.

The following information refers to the pressure regulator used in the pressure cooker:

Annual demand=25000 units, Cost per order=Rs.50

Unit price=Rs.500, Inventory carrying cost per unit, per year = 0.78ps

- a. On what basis was the ABC classification done?
- From the available information, calculate the following for the pressure regulator: i)Quantity to be ordered every time ii) Total ordering cost per year
 iii) Total holding cost per year.
- c. If quantity discounts are offered for larger quantities, do we still order as per the calculated EOQ? If not, what would be the basis for calculation of optimum order quantity per order? (10)
- 5) Briefly describe the differences Dependent Demand vs Independent Demand and what is meant by Decoupling Point. Explain how do manufacturing plants make use of this concept with suitable examples. (5)
