UNIVERSITY OF COLOMBO, SRI LANKA

FACULTY OF MANAGEMENT AND FINANCE
Postgraduate & Mid-career Development Unit

Master of Business Administration (MBA)/ MBA in Finance/MBA in Marketing/MBA in HRM
2015/2017 Weekend Programmes (Semester II First-half) Examination – September 2016

MBA 538 – Operations Management

Three (03) Hours

Answer **Any Five (05)** Questions

This paper has six (06) questions on three (03) printed pages.

---

1. i. An organization is considered as a system comprising various functions such as Marketing, Human Resources and Finance. It is important all these functions work together to satisfy the customers. Explain how the "operations function" interact with these function of the organization and vice versa.

(10 Marks)

ii. Operations Management covers both manufacturing and services sectors. However, there are many between manufacturing and service organizations.

a. Explain these differences.

b. Because of these differences, what are the challenges faced by an Operations Manager in manufacturing organization and a service organization.

(10 Marks)

(Total 20 Marks)

2. i. Supply chain management is a broader concept than operations management. Many business organizations have now established supply chain management departments.

a. Explain why supply chain management has become an important aspect in managing modern organizations.
b. Identify the elements of supply chain of an organization of your choice.

(10 Marks)

ii. Total Quality Management (TQM) is not just a technique used in an organization but it must be a part of culture of the organization. Explain the possible cultural differences between an organization which adopts TQM and one that does not adopt it.

(10 Marks)

(Total 20 Marks)

3. i. Business organizations use quantitative as well as qualitative techniques to forecast the future demand.

a. Discuss the importance of forecasting for a business organization.
b. Explain one of the commonly used qualitative forecasting techniques.

(10 Marks)

ii. Operations management decisions of an organization are based on the competitive priorities of that organization. Elaborate this statement by selecting a suitable organization in Sri Lanka.

(10 Marks)

(Total 20 Marks)

4. i. TechMarco needs 1600 metal boxes per year. The cost of each box is Rs. 400. Ordering cost is Rs. 200 per order. Carrying cost is 25% of per unit cost. Lead time is 5 days. TechMarco is open 365 days per year.

a. What is the optimal order quantity and re-order level? EOQ formula is $Q^* = \sqrt{\dfrac{2DC_o}{C_H}}$. Q^* is the EOQ when D is the annual demand, C_0 is the ordering cost per order and C_H is the holding cost.)

b. Current inventory policy of TechMarco is to order 200 boxes at once. What is the annual saving to TechMarco if the new inventory policy is adopted?

(10 Marks)

ii. Operations Managers today face a big challenge of designing new products to cater into the rapidly changing markets. In facing this challenge, they are more prefer to use the 'concurrent design approach' than using the 'sequential design approach.'

a. Explain the differences between the two approaches mentioned above.
b. What are the advantages of using the concurrent design approach in the above situation?

(10 Marks)

(Total 20 Marks)

5. i. Tambapanni Holdings Limited (THL), a large sale conglomerate business in Sri Lanka, is planning to construct a tourist hotel especially for business travellers and a milk powder manufacturing plant in 2017. The chairman of THL in his message given in the company's last year annual report has pointed that THL is committed to uplift the lives of rural families in Sri Lanka, while delivering the best returns for the shareholders.

Identify the factors that THL should consider in locating the tourist hotel and the milk powder manufacturing plant in relation to the above situation.

(10 Marks)

ii. Just-in-time (JIT) is considered as a tool that can be used by organizations to improve the productivity through elimination of waste such as inventory. Traditionally organizations could hide problems beneath the inventory. However, when the inventory levels are reduced, the above problems would become visible and managers are forced to solve those problems quickly.

Explain why JIT is considered as a forced problem solving technique, by identifying the problems that could be hidden beneath the inventory and proposing the solutions to address such problems.

(10 Marks)

(Total 20 Marks)

6. i. Two of the most commonly used techniques in designing process layout are relationship diagramming method and block diagramming method. Explain one of these models by taking a suitable service organization.

(08 Marks)

ii. Unita Garments Limited (UGL) is one of the subsidiaries of the CAM Holdings. All the subsidiaries of CAM produce various garments for high end European retailers such as GAP, Marks and Spencer and Victoria's Secret. Presently UGL runs with 200 machines and 300 operators. Most of the months they can meet the demand. However, during certain periods they find it difficult to meet the demand.

a. What are the alternative strategies available for UGL to manage its capacity in short term?
b. Discuss the advantages and disadvantages of each strategy.
c. What is the best strategy that UGL should adopt in managing its capacity and hence to meet the demand?

(12 Marks)

(Total 20 Marks)

****