

**The Open University of Sri Lanka**  
**Master of Business Administration in Human Resource Management**  
**Final Examination September 2020**  
**MSP9333/MCP2133 – Operations Management**



**Duration: Three (3) Hours**

**Date: 12<sup>th</sup> September, 2020**

**Time: 9.30 am to 12.30 pm**

**Instructions:**

- Answer any FIVE questions.
- Illegible handwriting is liable to lose marks.
- This question paper has seven questions in three pages.

**Question One**

- i. Describe how manufacturing (of goods) and service operations are different from each other. How does the differences and similarities of the above two affect operations management practices that are used for creating/adding value? Use suitable examples to elaborate your answer. (10 marks)
- ii. Explain, by using appropriate examples, operations management practices that are used at operational, tactical, and strategic levels of an organization. (10 Marks)

**(Total 20 marks)**

**Question Two**

- i. Explain why forecasting is critically important to a business organization? Describe the importance of forecasting in relation to operations activities related to human resources function of a manufacturing/service organization. (10 Marks)
- ii. Describe three forecasting techniques including at least one qualitative technique and one quantitative technique. In which situations does the said techniques are most appropriate?

**(10 Marks)**

**(Total 20 marks)**

### Question Three

- i. With suitable illustrations, describe the type of layout that are most suitable for a (a) a large scale garment factory, (b) a small tailor shop which has 20 employees and making small lots and, (c) a ship building facility, highlighting the advantages of using such layout. (10 Marks)
  - ii. As a senior executive in human resources, explain the factors that may have a major impact on location of an organization. What remedies would you suggest to minimize adverse effects of identified factors. (10 Marks)
- (Total 20 marks)**

### Question Four

- i. Explain the following types of inventories that are available within an organization with the needs/roles of such inventories. (08 Marks)
    - a. Incoming material
    - b. Work in progress
    - c. Finished goods
    - d. Maintenance parts
  - ii. A manufacturing company needs 8,000 units per year of a certain type of raw material for its operation. It costs Rs. 2,000/- per each purchase. The inventory holding cost for the company for this raw material is Rs. Rs. 200/- per unit per annum. The company operates 250 days per year. It takes at least 3 days to receive this raw material once the purchase order is placed. This particular raw material is not heavy and has no big volume. The company has limited warehouse space but can accommodate 1,000 units of this type of raw material without additional cost.  
You are required to calculate the followings
    - a. Daily demand for this raw material
    - b. Economic Order Quantity
    - c. Reorder level of inventory
    - d. If they order an amount equivalent of economic order quantity, what would be the total cost of inventory (excluding the cost of the raw material) ? (08 Marks)
  - iii. Describe the need for using ABC classification in inventory control. (04 marks)
- (Total 20 marks)**

Question Five

- i. What is vertical integration? Give any Sri Lankan examples for vertical integration. What are the advantages and disadvantages of vertical integration? (10 Marks)
  - ii.
    - a. Identify the elements of the supply chain of an organization of your choice.
    - b. Explain why supply chain management has become an important function in modern manufacturing organizations. (10 Marks)
- (Total 20 marks)**

Question Six

- i. Explain the differences between the cultures of a traditional organization and an organization that adopts TQM. (10 Marks)
  - ii. List and explain the four major categories of quality costs with suitable examples. (10 Marks)
- (Total 20 marks)**

Question Seven

Answer any 2 of the following. (10 Marks each)

- i. With suitable examples, explain what is meant by productivity and multi-factor-productivity and their importance to an organization.
- ii. Describe what is meant by 'Cleaner Production' and how it benefits the organization as well as the environment. Describe two alternative energy sources presently used in Sri Lanka and advantages and disadvantages associated with such sources.
- iii. Explain the application of material requirement planning that is used at production planning stage.

**(Total 20 marks)**

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