

**EASTERN UNIVERSITY, SRI LANKA**

**Faculty of Commerce and Management**

**First Year Second Semester Examination in Master of Business**

**Administration 2018/2019 (July 2020) (Proper)**

**MBA 1093 – Operations and Process Management**

**Answer all five questions**

**Time: 3 hours**

- Q1) a) *“Operations Management concern with the conversion of inputs into outputs, using physical resources, so as to provide the desired utilities to the customer, while meeting the other organizational objectives of effectiveness, efficiency and adoptability”.*

In view of the above statement explain the Scope of “Operations Management.”

(08Marks)

- b) *“Joseph G. Monks defines Operations Management as the process whereby resources, flowing within a defined system, are combined and transformed by a controlled manner to add value in accordance with policies communicated by management”.*

Based on the above statement define the term “Production System” and explain the characteristics of Production System.

(06 Marks)

- c) *“The production system is ‘that part of an organization, which produces products of an organization. It is that activity whereby resources, flowing within a defined system, are combined and transformed in a controlled manner to add value in accordance with the policies communicated by management.”*

Considering the above statement explain the Classification of Production System.

(06 Marks)

(Total Marks 20)

- Q2 a) *“Facility location is the process of determining a geographic site for a firm’s operations, and it is appropriate to divide the factors, which influence the plant location or facility location on the basis of the nature of the organization”.*

*Based on the above statement briefly explain the General locational factors that influence the plant location or facility location.*

(12 Marks)

- b) *“The primary goal of the plant layout is to maximize the profit by arrangement of all the plant facilities to the best advantage of total manufacturing of the product.”*

Considering the above statement explain the Principles of “Plant Layout.”

(07 Marks)

- c) *“Plant layout refers to the physical arrangement of production facilities. It is a floor plan of the physical facilities, which are used in production.”*

Based on the above statement, identify and explain the classification of Layouts.

(05 Marks)

(Total Marks 24)

Q3

- a) *“Production planning is the pre-determination of manufacturing requirements such as manpower, materials, machines and manufacturing process. In spite of planning to the minute details, most of the time it is not possible to achieve production 100 per cent as per the plan.”*

Considering the above statement, identify and explain the factors that affect Production Planning.

(05 Marks)

- b) *Materials Requirement Planning (MRP) is a technique for determining the quantity and timing for the acquisition of dependent demand items needed to satisfy master production schedule requirements.*”

Based on the above statement, identify and explain the Objectives of Materials Requirement Planning.

(04 Marks)

- c) *“Manufacturing a product or generating a service which meets the customer requirements must be managed in a cost effective manner, so that the long-term effects of quality cost on the business is a desirable one.”*

Based on the above statement, list the various types of cost of quality, and explain the failure cost of quality.

(09 Marks)

(Total Marks 18)

Q4

- a) *“Purchasing is an important function of materials management. In any industry purchase means buying of equipment's, materials, tools, parts etc. required for industry.”*

Based on the above statement explain the objectives of purchasing to a manufacturing organization.

(08 Marks)

- b) *“The procedure describes the sequence of steps leading to the completion of an identified specific task.”*

Based on the above statement explain the major steps involved in the purchasing procedure.

(08 Marks)

- c) *“Stores play a vital role in the operations of company. It is in direct touch with the user departments in its day-to-day activities. The most important purpose served by the stores is to provide uninterrupted service to the manufacturing divisions.”*

Considering the above statement explain the functions of stores in an organization which has more functional departments.

(06 Marks)

(Total Marks 22)

Q5

- a) *“Equipments are an important resource which is constantly used for adding value to products. So, it must be kept at the best operating condition. Otherwise, there will be excessive downtime and also interruption of production if it is used in a mass production line. Different approaches have been developed to know how maintenance can be performed to ensure equipment reaches or exceeds its design life.”*

Considering the above statement explain the different approaches used in the maintenance of production equipment with its advantages in a manufacturing organization.

(10 Marks)

- b) *The industrial waste and scrap consists of spoiled raw-materials, rejected components, defective parts, waste from production departments etc. involves some commercial values. They should be disposed of periodically and proper credit of the amount should be taken in the books of accounts. Hence, waste management places an important role in managing operations.*

Based on the above statement explain Reasons for generation and accumulation of waste in an organization.

(06 Marks)

(Total Marks 16)