THE OPEN UNIVERSITY OF SRI LANKA BACHELOR OF MANAGEMENT STUDIES DEGREE PROGRAMME LEVEL 04 FINAL EXAMINATION-2008



OPERATIONS MANAGEMENT -MCU 2205

DURATION: TWO (03) HOURS

DATE: 14-02-2008

TIME: 9.30 am to 12.30 noon

INSTRUCTIONS

- Answer any five (05) questions from the following.
- All questions carry equal marks.
- Q1) "Operations management is considered to be important for both product and service oriented organizations".
- a) Select any organization of your choice and show the operations management system in the organization by clearly indicating the components of the system. Use necessary illustrations for your answer. (10 Marks)
- b) "Though the operations management has been in existence over the years in history, at present dynamic changes are taking place in the operations management field". Compare the operations management system of the 21 century with that of the 19th century? (10 Marks)
- Q2) "Different organizations follow different operational strategies to make their production effective and efficient".
 - a) Identify different production strategies. Give examples for each type. (10 Marks)
 - b) With an illustration explain the framework of strategic formulation. Use practical examples to explain your answer. (10 Marks)
- Q3) "As resources are limited, organizations strive to maximize their productivity gained from its resources".
- a) Assume yourself as the production manager of a garment factory and explain how you will maximize productivity in the factory. (8 Marks)
- b) The following information is related to the manufacturing of type X shirt in a garment factory for the month of November 2007.

Shirts Produced in type X- 500 shirts of Rs 350/= each Materials used- 100 meters of Rs 100/= each Labours used- 10 employees worked for 12 days at the hourly rate of Rs 70/= Electricity and fuel absorbed for the production of type X shirt- Rs 12000/=

From the above information compute the following

- I. Partial productivity measures
- II. Multi factor productivity measures
- III. Total factor productivity

Out of the above computed measures, which is the most suitable to measure productivity. Give reasons. (12 Marks)

Q4) "Organizations have to ensure appropriate plant layout for their facilities as it has direct impact on the production efficiency".

a) Assume that you are designing the plant layout of your office or factory. Explain what features you will expect to be included in the plant layout. (8 Marks)

b) Describe the different types of plant layout, you can observe in manufacturing organizations. Give suitable examples. (12 Marks)

Q5) "Inventory control is considered to be an important aspect in production management for varieties of reasons".

a) Identify the importance of inventory control to an organization.

(8 Marks)

b) Following information relates to a bakery.

Total yearly demand for flour- 250000 Kg Cost for making each assignment of stock (Flour) – Rs. 50/= Cost of handling Flour – Rs. 4/= per each Kg of flour

You are required to

- I. Find out the number of units to be ordered at a time so that the total inventory cost is at minimum level.
- II. Find out the number of orders to be made per year when a quantity in (1) above is made.
- III. Find out the lead time if the total number of weeks worked per year is 50. (12Marks)
- 6) "Quality can be defined as the fitness for use and, awareness about quality among the public has well grown than ever before".
- a) Select any particular production and briefly explain how a quality control manager ensures the quality at the each stages of the said production. (12 Marks)
- b) Discuss the different costs of quality with examples.

(8 Marks)

- 8) Write short notes to any five (5) practices from the following
 - a) Influence of Japanese management in Operations Management
 - b) Types of Production
 - c) Control Chart as the quality control procedure
 - d) Maintenance and replacement
 - e) Open System
 - f) Degree of Standardization

(5 X 4 Marks = 20 Marks)