



KIBABII UNIVERSITY COLLEGE

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UNIVERSITY REGULAR EXAMINATION

2013/2014 ACADEMIC YEAR

SEMESTER EXAMINATION

COURSE CODE: MBA 817

COURSE TITLE: PRODUCTION AND OPERATIONS MANAGEMENT

DATE: 18TH AUGUST, 2014

TIME:8:00A.M.-11:00A.M.

INSTRUCTIONS:

ATTEMPT ANY FOUR QUESTION

Question One

Kanduyi incorporation is bidding on a contract to repair and refurbish a dilapidated structure in Kibabii University. It has identified the following activities along with their predecessor restrictions and expected times required to undertake each activity.

Activity	Dependence	Normal Duration (days)	Normal Cost(t)	Crash Duration (days)	Crash (cost t)
A	-	6	300	5	400
B	-	8	400	6	600
C	A	7	400	5	600
D	B	12	1000	4	1400
E	C	8	800	8	800
F	B	7	400	6	500
G	D,E	5	1000	3	1400
H	F	8	500	5	700

In addition to the above cost figures there are t60 indirect costs per day during the project.

- Using normal duration determine the total overall cost for the project and its duration. (10mks)
- Find the project duration that will minimize the total cost of the project. (13mks)
- Determine the total cost of completing the project in the shortest possible time. (2mks)

Question 2

- A company produces two types of products say type A and B. Product B is of superior quality and product A is of a lower quality. Profits on the two types of products are Sh. 30 and sh 40 respectively. The data on resources required, availability of resources are given below:

	<i>Requirements</i>		<i>Capacity available per month</i>
	<i>Product A</i>	<i>Product B</i>	<i>Per month</i>
Raw materials (kg)	60	120	12,000
Machining (hours per piece)	8	5	600
Assembly (man hour)	3	4	500

How should the company manufacture the two types of products in order to have a maximum overall profit? (10 Marks)

- b) Explain the key issues to be considered for managing global operations (6 Marks).
- c) Operations strategy is concerned with what operations have to do in order to meet current and future challenges of an organization. Using well articulated examples briefly discuss the three levels of operations strategy (9 Marks)

Question Three

- a) Production function is that part of an organization which is concerned with the transformation of a range of inputs into the required outputs having the requisite quality level
Write brief explanatory notes on the following concepts of production system bringing out their major advantages and disadvantages.
 - i) Job shop production (6 Marks)
 - ii) Batch production (6 Marks)
 - iii) Continuous production (6Marks)
- b) Objectives of operations management can be categorized into customer service and resource utilization. Elucidate the above statement with relevant examples bringing out clearly the major aspects of customer service (7 Marks).

Question Four

- a) In design considerations, location choice is of primary importance to a firm:

Required

- i. State the difference between manufacturing and service firms, location choice considerations. (8 Marks)
- ii. Identify and explain the factors that Bungoma County should consider in locating public transport terminus within Bungoma town. (10 Marks)
- b) Waste is considered in the widest sense as any activity which does not add value to the operation. Discuss the seven types of waste as propounded by Toyota (7Marks)

Question Five

- a) Garvin (1984) identified eight dimensions of quality. Using Golf Hotel – Kakamega as an example, discuss the major dimensions of quality. (10 Marks)
- b) Quality control may defined as a system that is used to maintain a desired level of quality in a product or service. Highlight five main objectives of quality control (5 Marks).
- c) Operations should focus on specific capabilities that give it a competitive edge which may be termed competitive priorities. Using well articulated examples discuss the four major priority areas (10 Marks).