

TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF BUSINESS_ DEPARTMENT OF MANAGEMENT SCIENCE

PAPER A (FEB-MAY 2016)

END OF SEMESTER EXAMINATION QUESTIONS

COURSE CODE AND TITLE: BPC 4305_ OPERATIONS MANAGEMENT

CLASS: BCOM PROCUREMENT, LOGISTICS AND MANAGEMENT SCIENCE

OPTIONS YEAR 3

INSTRUCTIONS:

- i. Answer question one and any other two questions
- ii. Do not write on the question paper
- iii. Time allowed is 2 hours

QUESTION ONE

- a) The following table gives the activities predecessors and the 3 time estimates for each in weeks.

<u>Activity</u>	<u>Predecessor</u>	<u>Optimistic Time (t_o)</u>	<u>Most likely Time (t_m)</u>	<u>Pessimistic Time (t_p)</u>
A	-	1	2	3
B	-	1	2	3
C	-	1	2	8
D	A	1	2	9
E	A	2	3	10
F	B	3	6	15
G	B	2	5	4
H	D, E	1	4	7
I	C	4	9	20
J	I, G	1	2	9
K	H, F, J	4	4	4

Required

- a) Using the Project Evaluation and Review Technique (PERT) determine the project critical path and project duration (12 marks)
- b) What is operations management? Explain some of the current issues that impact on operations management function in organizations (10 marks)
- c) What is an operation Strategy? Discuss the key competitive dimensions that characterize operations strategy (8 marks)

QUESTION TWO

- a) The increasing rate of change has led to increasing complexity of the problems to be solved in operations management. With examples, explain the reasons for the growing need for operations consultancy (10 marks)
- b) What is strategic capacity planning? With examples, explain the different types of capacity (10 marks)

QUESTION THREE

- a) With an example, explain the concept of productivity and show how an organization's productivity can be measured (10 marks)
- b) Explain how the Kaplan and Norton's Generic Strategy map can be used in designing an operations management strategy (10 marks)

QUESTION FOUR

- a) What is operations planning and control? With examples, explain any four operations planning and control activities (10 marks)
- b) Quality costs consist of the costs of not getting something right first time. With clearly explained examples discuss the various types of quality costs (10 marks)

QUESTION FIVE

- a) The problem of facility location is faced by both new and existing businesses, and its solution is critical to a company's eventual success. Discuss the criteria that influence manufacturing plant and warehouse location planning (10 marks)
- b) Explain the meaning of logistics management and discuss the importance of logistics in operations management (10 marks)