



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

Faculty of Engineering and Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIT2K 9J/DICTK 9J/DICT 9M/DIT 9M

ECS 2305 & EIT 2305: PRINCIPLES OF PROJECT MANAGEMENT

END OF SEMESTER EXAMINATIONS

SERIES: AUGUST/SEPTEMBER 2011

TIME: 2 HOURS

Instructions to Candidates:

This paper consist of **TWO** sections **A** and **B**

Answer question **ONE (COMPULSORY)** and any other **TWO** questions from the list of questions below

This paper consists of **THREE** printed pages

SECTION A COMPULSORY (30 MARKS)

Question 1

- a) Define the term project (2 marks)
- b) Name and explain **SIX** characteristics of a project (10 marks)
- c) What is waterfall model, state and explain the stages of the model (8 marks)
- d) Define the following terms as used in project management (10 marks)
 - (i) Normal time
 - (ii) Crash time
 - (iii) Normal cost
 - (iv) Crash cost
 - (v) Cost slope

SECTION B (ANSWER ANY TWO QUESTIONS)

*This section consists of **FOUR** questions 20 marks each. Choose any **TWO** questions*

Question 2 (20 marks)

- a) What is the meaning of the word program as used in projects (3 marks)
- b) Define the term Risk Management (2 marks)
- c) What are the four stages of risk management planning (5 marks)
- d) What is the criterion used to test the completeness of work breakdown structures (10 marks)

Question 3 (20 marks)

- a) What is project crashing (2 marks)
- b) What is a work breakdown structure (WBS) and of what importance is it to the project manager (10 marks)
- c) List and explain **FOUR** project tools (8 marks)

Question 4 (20 marks)

- a) Briefly explain the advantages of Critical Path Methods (CPM) in Project Management (12 marks)
- b) What is the use for forward and backward pass information in the process of developing a network plan for a project (8 marks)

Question 5 (20 marks)

KBL Limited listed the following activities in respect to a project

ACTIVITY	PRECEDING ACTIVITY	DURATION (DAYS)	NO OF STAFF
A	-	2	6
B	A	3	2
C	A	5	4
D	A	8	2
E	B	6	6
F	C	1	5
G	C	2	3
H	C,D	3	3
I	E,F	7	4
J	G,H	4	5
K	I,J	5	4

Required:

- a) Draw an A.O.A diagram and determine the critical path (6 marks)
- b) Calculate the total float, free float and independent float on non-critical activities (4 marks)
- c) Draw a Resource Aggregation Profile and establish the minimum number of staff required for the project (10 marks)