



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

## *Faculty of Engineering and Technology*

### DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

HIGHER DIPLOMA IN COMPUTER STUDIES – H/DIP 10A  
YR I SEM I

**EIT 3112: PROJECT MANAGEMENT**

**END OF SEMESTER EXAMINATIONS**

**SERIES: AUGUST/SEPTEMBER 2011**

**TIME: 2 HOURS**

#### **Instructions to Candidates:**

You should have the following for this examination

- *Answer booklet*

This paper consists of **TWO** sections **A & B**

Answer question **ONE (COMPULSORY)** in section **A** and any other **TWO** questions in section **B**

This paper consists of **THREE** printed pages

**SECTION A –Answer all questions in this section (30 MARKS)**

**Question 1 (Compulsory)**

- a) Define the term project (2 marks)
- b) Name and explain **SIX** characteristics of a project (12 marks)
- c) What is a waterfall model, state and explain the stages of the model (5 marks)
- d) What is project scheduling and what does it involve? (8 marks)
- e) What are the basic areas that idea screening during feasibility study? (3 marks)

**SECTION B (Answer any TWO questions) – 40 MARKS**

**Question 2**

- 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**

- 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**

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

**Question 5**

KBL Ltd 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)