



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

Faculty of Engineering and Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR DEGREE IN BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY (BSc. I.T. 9S) (YR III, SEM II)

BIT 2215: PROJECT MANAGEMENT

END OF SEMESTER II EXAMINATION

SERIES: DECEMBER 2011 **TIME:** 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- Answer Booklet

This paper consist of **FIVE** questions in **TWO** sections **A** & **B** Answer question **ONE (COMPULSORY)** and any other **TWO** questions Maximum marks for each part of a question are as shown This paper consists of **THREE** printed pages

SECTION A (Compulsory)

QUESTION 1 (30 marks)

| 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 | (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 (Attempt 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 of 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 |
| В | A | 3 | 2 |
| С | A | 5 | 4 |
| D | A | 8 | 2 |
| E | В | 6 | 6 |
| F | С | 1 | 5 |
| G | С | 2 | 3 |
| Н | 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 require Project (1 | ed for the 0 Marks) |
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