THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

Faculty of Engineering and Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY
DICT 2K 11M, DICT 2K 9J
DIPLOMA IN INFORMATION TECHNOLOGY – DIT 2K 11M

EIT 2305 & EIT 2204: PRINCIPLES OF PROJECT MANAGEMENT

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: OCTOBER 2011

TIME: 2 HOURS

Instructions to Candidates:
You should have the following for this examination
- *Answer booklet*

Answer question **ONE (COMPULSORY)** in section A and any other **TWO** questions from section B
This paper consists of **THREE** printed pages
Maximum marks for each part of a question are clearly shown.

SECTION A (30 marks)

Question 1 (Compulsory)

a) Explain what is meant by a 'successful' project   (4 marks)

b) Identify and explain briefly SIX factors that the project manager might consider when allocating staff to a project   (6 marks)

c) Explain the difference between quality control and quality assurance   (4 marks)

d) You are an IT manager responsible for selecting a project manager for an MIS development project. Describe the principal skills and qualities you would expect the project manager to posses.
                                                                                                              (10 marks)
e) Identify not more than SIX of the major types of activity that would be carried out in a software development project.   (6 marks)

SECTION B (40 marks)

Question 2 (20 marks)

a) Identify FOUR generic risks that can threaten the success of a project   (4 marks)

b) Explain the difference between risk avoidance and contingency actions, illustrating your answer by suggesting possible risk avoidance and contingency actions for TWO of the risks identified in (a) above   (6 marks)

c) Describe Project Charter and Project Requirement Documents and its relevance to Project Management Construct a sample Project Charter and Project Requirement documents to explain your description   (10 marks)

Question 3 (20 marks)

a) Using a relevant example discuss Earned Value Management (EVM) as a tool of project cost control
                                                                                                              (10 marks)
b) Describe the steps that can be taken to monitor and control the quality of products created by a project.   (10 marks)

Question 4 (20 marks)

An IT project will have the following activities. The estimated elapsed time for each of the activities is given.

   (i) Detailed requirements gathering and specification (4 weeks)
   (ii) Database design (1 week) – this will be based on the data analysis carried out in activity (i).
   (iii)   Build data input software (6 weeks)
   (iv) Build enquiry software (3 weeks)
   (v) Build reports software (4 weeks). Activities (iii), (iv) and (v) can be carried out at the same time.

(vi) Integration testing (1 week) – this is carried out by the developers to ensure that the software components operate together correctly.

(vii)   Writing user manuals (2 weeks) – this activity is started as soon as the building of three components of software has been completed, but does not have to wait for integration testing.

(viii)   System testing (2 weeks) – this is done by the end-users, who follow the instructions in the user manuals to try out the integrated system.

Using the above scenario;

a) Draw up an activity network   (8 marks)

b) Calculate the earliest start, latest finish (expressed in week numbers) and float, for each of the activities in the scenario, explaining each step in the calculation. Show how the floats for activities can be used to indicate the critical path for the project.   (12 marks)

Question 5 (20 marks)

a) A software house needs to change its current unstructured approach to project management. Produce a report to the Managing Director of the software house which explains, with supporting examples, each of the following techniques. The report should discuss any potential benefits and/or drawbacks of applying each technique.

   (i) Work Breakdown Structures   (5 marks)
   (ii) Resource smoothing   (5 marks)

b) Briefly explain the project time management steps.   (10 marks)