



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)
University Examinations for 2015/2016 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FIRST SEMESTER EXAMINATION FOR DEGREE IN BACHELOR OF SCIENCE IN
COMPUTER SCIENCE

SCO 302: SOFTWARE PROJECT MANAGEMENT

Date: 4/8/2016

Time: 8:30 – 10:30 AM

INSTRUCTIONS

This paper consists of FIVE questions

Answer question ONE and other TWO questions in this paper.

QUESTION ONE (30 MARKS) (COMPULSORY)

- Define a project and state its three main attributes? (4 marks)
- Briefly explain the differences between functional, matrix and project organizations. (3 marks)
- State two examples of Information Technology Projects (2 marks)
- Discuss the life cycle of Computer Science Projects (10 marks)
- Consider a project to develop an enterprise resource planning system whose main activities have been identified and coded as follows:-

Activity	Preceding Activity	Activity Duration (days)
A	-	5
B	-	6
C	A	4
D	A	5
E	B	2
F	B	5
G	C, E	4
H	C, E, F	6

- i) Draw a network diagram for the above project. (8 marks)
- ii) Determine the critical path. (3 mark)

QUESTION TWO (20 MARKS)

- a) James has been contracted to assist in planning a project to be executed in a given company. Discuss the main activities that he may engage in. (10 marks)
- b) Explain the activities involved in risk management (10 marks)

QUESTION THREE (20 MARKS)

- a) Describe the different ways to develop a WBS. (6 marks)
- b) Explain three reasons why organizations outsource. (6 marks)
- c) Summarize the different tools and techniques project managers care used to help them manage project teams. (8 marks)

QUESTION FOUR (20 MARKS)

- a) Describe each of the following charts and state the situations where it would be most appropriate.
 - i. Project organizational chart
 - ii. Responsibility assignment matrix
 - iii. Resource histogram. (6 marks)

- b) Discuss three common sources of risk on information technology projects and suggestions for managing them. (6 marks)
- c) Discuss project planning in terms of the major three activities that are involved in it. (8 marks)

QUESTION FIVE (20 MARKS)

- a) Explain three roles of the project team in project management. (6 marks)
- b) Discuss four dimensions of standards that can be used to analyze a software product. (8 marks)
- c) A project management team wants to undertake quality management as one of the major activities of the team. Explain three quality management activities they are likely to do. (6 marks)