



W1-2-60-1-6

**JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY**

University Examinations 2017/2018

**FIRST YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF
SCIENCE IN SOFTWARE ENGINEERING**

ICS 3108: SOFTWARE PROJECT MANAGEMENT

DATE: JANUARY 2018**TIME: 3 HOURS**

INSTRUCTIONS: Answer Question **ONE** and any other **TWO** Questions

QUESTION ONE

Your company needs a better stock control system. It has decided to acquire the Stock-In package and amend this to meet its requirements. It has set up a project board and you have been appointed project manager. You will need to assemble and manage a joint team of internal company staff and external technical specialists for the various aspects of this project. It is the first such IT project that your company has undertaken.

The stock department manager has nominated three members of the department. They will help with the design and testing of the new system. An outside agency will supply four technical staff to help with programming and analysis work. These technical staff will become available at various times over the next few weeks, once they have completed their current assignments.

In addition a technical consultant from the Stock-in package suppliers will be based in your office for two weeks immediately after the design phase has been completed. This consultant will help install the amended package onto your system.

You have been allocated a small basement office, designed for just four people, near the canteen. It is a long way from the company's warehouse and stock control office.

- (a) What are some of the team issues that you would expect to deal with during the early stages of the project? **[6 Marks]**

- (b) Name and describe briefly THREE management styles. Identify THREE groups of people involved in the development of the project described above, and discuss which of these three styles would be most appropriate for you to use to manage each of these groups.

[8 Marks]

- (c) Define what is meant by a "project stakeholder". List at least SIX individuals or groups who might be stakeholders in this project. Some, but not all, of these may have been mentioned above

[6 Marks]

QUESTION TWO

- (a) Describe FIVE techniques you can use to estimate the cost of a project, explaining the advantages and disadvantages of each one.

[15 Marks]

- (b) What actions can be taken to keep a project on track if a task takes longer than estimated?

[5 Marks]

QUESTION THREE

For a particular project it has been decided that the project manager should produce a report for the project board (or steering committee) at the end of each four-week period.

- (a) Describe the items of information that should appear on this report.

[8 Marks]

- (b) Explain how the project manager would obtain the data used to generate the information in the report.

[6 Marks]

- (c) A problem with the project turns out to be that the users keep asking for changes to the requirements. Discuss what might be done to deal with this problem.

[6 Marks]

QUESTION FOUR

You are the newly appointed project manager for a software development project that is running late. You ask the previous project manager what the causes of the delay are and she gives you three answers:

- Staff originally allocated full-time to the project sometimes work on the emergency maintenance of other applications.
- The original estimates of effort were over-optimistic
- Productivity is lower than expected.

Before you take any action, you want to check the outputs of the project control processes.

- (a) Explain how you would check whether each of the causes above was correctly identified and which project control processes would supply the information needed for the check.

[6 Marks]

- (b) Write a memo to the project sponsor explaining FOUR options for dealing with the delay to the project.

[8 Marks]

- (c) One possible response to a delay is an exception report. What are the contents of an exception report?

[6 Marks]