



(Knowledge for Development)

KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS
YEAR THREE SEMESTER TWO**

**FOR THE DEGREE OF
(COMPUTER SCIENCE)**

COURSE CODE : CSC 325
**COURSE TITLE : SOFTWARE PROJECT
MANAGEMENT**

DATE: 13/10/2021

TIME: 09.00 A.M – 11.00 A.M

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE [COMPULSORY] [30 MARKS]

a. Define the following Project management terminologies;

- i. Deliverables [1 Mark]
- ii. Milestones [1 Mark]
- iii. Risk mitigation. [1 Mark]

b. Kenya Airways is in the process of developing a flight Control software for its new Boeing 787 Max 9 series planes. This is one of the biggest Software project the organization is undertaking since its inception. It is known that many IT projects undertaken usually fail. The organization is therefore keen on hiring a firm that has experts in handling software projects successfully so as to deliver this project within the set timelines and budget.

- i) What do you understand by the term project? [2 Marks]
 - ii) Does this undertaking qualify to be called a project? Explain. [5 Marks]
 - iii) How will project management help in the success of this project. [5 Marks]
 - iv) Identify and explain the stakeholders that will be directly involved in and affected by this project. [6 Marks]
 - v) Site any three factors that may cause this project to fail. [3 Marks]
- c. Discuss any THREE Indicators of a successful project. [6 Marks]**

QUESTION TWO [20 MARKS]

a. Your team is working a Student management project for a private University and the project manager has just realized that it is behind the schedule and may not deliver the project on time. She is considering adding more staff to the team. What would be the potential advantages and disadvantages of this approach? [8 Marks]

b. In any project, "Conflicts are inevitable" among team members. Explain any THREE sources of conflicts in project undertakings? [6 Marks]

c. The table below shows the list of activities, their duration and immediate predecessors

| Activity | Duration in weeks | Immediate predecessors |
|----------|-------------------|------------------------|
| A | 4 | - |
| B | 3 | - |
| C | 3 | - |
| D | 12 | C |
| E | 7 | B |
| F | 5 | A |
| G | 3 | E,F |

Required:

i) Construct an Activity on Node diagram for the project

[6 marks]

QUESTION THREE [20 MARKS]

- a. A software development firm has been selected to develop Kibabii University Management System. The firm contracted to undertake the a Software project in Kibabii University should anticipate some uncertainties and plan on how to control them so as to successfully manage and deliver the software.
- Differentiate between a risk and risk management. [2 Marks]
 - What are some of the risks the firm should anticipate in this project? [4 Marks]
 - How can the project manager overcome these risks? [4 Marks]
- b. Risk management has two major components: Risk Analysis and Risk Management. Discuss the activities that are involved in each component. [6 Marks]
- d. Discuss staff selection factors the project manager will use as a basis for hiring staff for a Software project.. [4 Marks]

QUESTION FOUR [20 MARKS]

- a. In regard to the Kibabii Odel platform site with an example three main categories of outputs for quality control? [4 Marks]
- b. Describe the project management activities in the order in which they must happen stating the deliverable(s) that come out of each activity. [8 Marks]
- c. Software cost estimation is an activity that will be carried out at various stages of “Software project development process. Explain specific points at which cost estimates will be required. [4 Marks]
- d. Discuss some of the software cost estimation techniques the “project manager may use and when each is applicable. [4 Marks]

QUESTION FIVE [20 MARKS]

- a. The project manager for developing and changing a Library borrowing system in Kibabii University has realized that the project team is going slow and may deliver the Software behind schedule.
- i) What problems could the team be facing? [3 Marks]
 - ii) As a project manager, how would you solve the problems? [3 Marks]
 - iii) What are some of the skills you must have in order to solve the problems during project management? [2 Marks]
- b. Discuss the Triple point constraints in project management. [6 Marks]
- c. Discuss six resources needed in software development projects [6 Marks]