(Knowledge for Development)

KIBABII UNIVERSITY
(KIBU)

UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR

END OF SEMESTER EXAMINATIONS
YEAR ONE SEMESTER ONE EXAMINATIONS

FOR THE DEGREE OF MASTER OF SCIENCE IN
(MIT/MBA)

COURSE CODE   : MIT 811/MBA 832
COURSE TITLE   : IT Project Management

DATE: 17/06/2022   TIME: 9.00 A.M. – 12 NOON

INSTRUCTIONS
ANSWER ANY THREE (3) QUESTIONS. ALL QUESTIONS CARRY
EQUAL MARKS.

QUESTION ONE [20 MARKS]

a. A new application software to enhance service delivery is required in your Organization. You have been tasked with the responsibility to ensure that the organization acquires this software within the time frame given.

    i.   Explain how you would initiate this new software project in your organization as the lead project manager. **[8 Marks]**

    ii.   Identify TWO documents that you will have to prepare at this stage. **[2 Marks]**

    iii.   Explain how a project management plan will be helpful for you in this project.

[10 Marks]

b. State and explain some of the resources you will need for this project. **[6 Marks]**

QUESTION TWO [20 MARKS]

The Federal Bureau of Investigation (FBI), initiated Trilogy, a "disastrous, unbelievably expensive piece of vaporware project. This project despite having been worked on for four years, it still failed. The *system was supposed to enable FBI agents to integrate intelligence from isolated information silos within the Bureau.*" The Government Accounting Agency said that the Trilogy project failed at its core mission of improving the FBI's investigative abilities and was plagued with *missed milestones and escalating costs.*

The FBI rushed to develop the new system in 2001, in response to the attacks on September 11. The need for new software was obvious to former FBI agent David J. Williams, who recalls joining a roomful of agents shortly after 9/11 to help with intelligence. Agents were wearing out the casters on their chairs by sliding back and forth among 20 old computer terminals, many of which were attached to various databases that contained different information. Congressional hearings revealed numerous problems with the project. *Its requirements were very loosely defined, there were many leadership changes throughout the project, and several contracts had no scheduled milestones for completion or penalties if work was late.* The new system was finally completed in 2006 and cost more than $537 million—more than a year late and $200 million over budget. The FBI replaced Trilogy with a new system called Sentinel and began training employees to use it in May 2007.5 Unfortunately, history repeated itself as troubles still loomed with Sentinel in 2012. According to the FBI's original plan, Sentinel was to be completed by December 2009 at an estimated cost of $425 million.

The FBI later increased the estimated cost to $451 million and extended the project completion date twice, so that the project was now two years behind schedule. During a test exercise in 2011, the system experienced two outages, and the FBI *determined that its current hardware structure was in adequate*.

i. Explain how the project manager could have effectively managed the timing of the project.

[5 Marks]

ii. What do you understand by the term "Milestone" in project management.

[2 Marks]

iii. What do you think lead to the poor definition of requirements in this project.

[3 Marks]

iv. What could the project manager have done to ensure that the budget is not inflated?

[5 Marks]

v. During a test exercise in 2011, the system experienced two outages, and the FBI determined that its current hardware structure was inadequate. Explain how the project manager could have handled this issue at the initiation stage.

[2 Marks]

vi. Outline any three characteristics of a project?

[3 Marks]

QUESTION THREE [20 MARKS]

a) Many projects may stall due to unforeseen risks. How would you identify possible risks in a software development project being undertaken in your organization.

[6 Marks]

b) Most projects that are undertaken in organizations, consume resources. With examples explain some of the resources required for an IT software project.

[9 Marks]

c) Suppose you are a project manager and you've ordered ten new servers. The servers arrive one at a time and your team unpacks each one and begins to install them. After five of the servers are set up and installed, each one begins to fail because of a manufacturing problem. The vendor agrees to replace them immediately and assures you that it won't happen again, but you've spent half of your budget setting up and installing defective servers. You have a choice of reinstalling the new

servers whereby your project will be late and use up your entire project's reserve, or subcontracting with another consulting firm that will ensure that the project is delivered on time but will exceed your reserve by 100 percent. Explain how would you handle this situation? **[5 Marks]**

QUESTION FOUR [20 MARKS]

a) In conducting a stakeholder analysis, why is it important not only to identify those who will gain from the project's success, but also those who may gain from its failure? **[4 Marks]**

b) Monitoring and control is a very critical element in IT projects. The project manager therefore charged with the responsibility of reporting to management the progress/ performance of the project. Explain the various reports you may present to management as a project manager.

[8 Marks]

c) Communication is one of the most important project management core areas. Outline and explain any THREE tools a project manager can use to communicate the project issues to management and other stakeholders. **[6 Marks]**

d) Distinguish between quality and quality assurance as used in project management. **[2 Marks]**

QUESTION FIVE [20 MARKS]

a) Why should quality management include both the products and processes of a project?

[4 Marks]

b) Suppose the organization you work in, is considering the purchase of an enterprise software package that would be a mission-critical application for that organization. What are the logistics for ensuring quality software product? **[10 Marks]**

c) Kenya Government in its manifesto promised to deliver laptop projects to young learners as a way to enhance ICT skills in learners. The project failed on arrival.

i. Justify the main causes of IT project failures. **[4 Marks]**

ii. Provide any TWO solutions that would have made this project successful.   **[2 Marks]**

QUESTION SIX [20 MARKS]

a. What do you understand by following terms?

    i. Project management framework.   **[2 Marks]**

    ii. Project Quality Management   **[2 Marks]**

b. Cost management is the process of planning and controlling the costs associated with a Project. Explain what you would consider in quantifying the total cost of a project.

[14 Marks]

c. Explain how a project team can achieve quality in a software system they are development.

[2 Marks]