



SCHOOL OF COMPUTING & ENGINEERING SCIENCES
BACHELOR OF SCIENCE IN COMPUTER NETWORKS AND CYBER SECURITY
END OF SEMESTER EXAMINATION
CNS 4205: PROJECT MANAGEMENT

DATE: Monday, 9th December 2024

TIME: 08:00 – 10:00

Instructions:

Answer question One in Section A and any other two (2) from Section B.

Section A

Question One [Compulsory]

[20 marks]

- a. For an endeavour to be termed as a “project” it must fulfil a number of conditions. Discuss any **four**. **(4 marks)**
 - b. Explain what is referred to as “Project Management” **(4 marks)**
 - c. Effective project managers must take cognisance of the environment in which their projects are operating in. Discuss the environmental context of typical projects. **(8 marks)**
 - d. How do you know a project is successful? Discuss any **two** crucial aspects. **(4 marks)**
- (Total 20 marks)**



Section B - Choose any two Questions from here

Question Two



The success of any project largely depends on effective interaction between various stakeholders. Good relationships with stakeholders is paramount hence stakeholder management is extremely crucial in project management.
Write short notes for each of the sections in the table below.

Stakeholder	Brief Description (1 marks each)	Interest of the stakeholder in the project (2 marks each)	Information sought by the stakeholder (3 marks each)	Importance of the stakeholder (4 marks each)
Suppliers				
Government agencies				

[Total 20 marks]

Question Three



You saw an advertisement for a project manager job that you found appealing- because it was to manage a software development project- and you applied. They have responded that you explain about your plan for the project.

- Explain to them the difference between “scope” and “deliverable” **(2 marks)**
- They wish to know what the project scope management entails. Explain the project scope management processes.

(10 marks)

- Project scope management requires preparing Work Breakdown Structures (WBS). Discuss any **four** approaches to developing WBSs. **(8 marks)**

[Total 20 marks]

Question Four

Earned value management (EVM) is useful in establishing the extent of the progress of projects, especially, with regards to use of resources as well as managing the schedule (time). Use the information below to answer the questions that follow.

Assume you have been hired as a project manager to manage the development of a new system for enrolling students at Strathmore University. The project entails purchase of new equipment like servers and other peripheral devices as well as developing software. It also involves many stakeholders. The project is expected to cost Ksh. 20,000,000 spread over 4 years with the cost accrual being prorated. One year into the project the status is as follows:

- Actual cost incurred is Ksh. 6,000,000
- Percentage of overall project scope completed is 20%

Required:

- Explain the scenario presented above as well as the implication for the project success. **(6 marks)**
- What might have led to the occurrence? Discuss any **four** possibilities. **(8 marks)**
- Calculate the CPI and SPI of the above project as at the end of year 1. Explain your results.

(6 marks)
[Total 20 marks]

Question Five

Assume you are a project manager who wishes to implement a project. The top management wishes to find out about how you would schedule the various activities graphically. The activities are listed below.

Activity	Previous Activity	Duration (Days)
A	-	3
B	-	6
C	-	2
D	A	4
E	C	3
F	B, D, E	6
G	A	7

Required:

- Draw a network diagram using the Activity-on-Arrow (AOA) method to depict the flow of the activities showing interdependencies (8 marks)
- Specify the critical path (2 marks)
- Explain any **five** ways that project management software like Ms Project aids in ensuring project success. (10 marks)

[Total 20 marks]