ZCAS UNIVERSITY

SCHOOL OF COMPUTING AND APPLIED SCIENCES

CIT3242 IT PROJECT MANAGEMENT

MID-SEMESTER EXAMINATION

THURSDAY 26TH OCTOBER 2023

12:30 – 15:30 HOURS

Time allowed: 3 HOURS plus 5 Minutes reading time.

INSTRUCTIONS:

1. Section A: this question is **compulsory** and must be attempted.

2. Sections B: Answer **THREE (3)** questions from this section.

3. This examination paper carries a total of **100 marks**.

4. Candidates must **not turn this** page until the invigilator tells them to do so.

SECTION A: Question 1 is compulsory and must be attempted

QUESTION 1.

Read the following and then answer the questions that follow.

You are a project manager at a software development company, leading a team responsible for developing a new mobile app. The project involves creating a fitness tracking app that will be used on both Android and iOS platforms. The project has a fixed timeline of six months and a budget of K200,000. You are currently in the third month of the project, and there have been some unexpected challenges and delays.

Required:

    a) Provide the project cycles that you would involve when developing a new mobile app. Explain the purpose of each. **(10 Marks)**

    b) List and briefly explain the five stages by which a project can be drawn up.

                                                (10 Marks)

    c) As a Project Manager, you undertook the feasibility study for the mobile App before starting the project. Explain what feasibility study is and provide methods that can be used to accomplish the study. **(10 Marks)**

    d) In the lifetime of the mobile App project, risks could be encountered. Mention risks that you could encounter in this project. **(10 Marks)**

                                                  [Total: 40 Marks]

SECTION B: Attempt any THREE questions in this section

QUESTION 2.

You are a project manager assigned to plan and execute the development of a new e-commerce website for a small business. The project involves designing and building a user-friendly website with e-commerce capabilities within a six-month timeline. The budget for the project is K500,000. You are in the initial planning phase of the project.

Required

a) Explain the importance of project planning in the context of your e-commerce website project. Identify and discuss the key elements of a project management plan that you need to develop to ensure the project's success. **(5 Marks)**

b) In your e-commerce website project, you have identified several stakeholders, including the business owner, web developers, designers, and marketing team. Describe the process of stakeholder identification and analysis and explain how you will prioritize and manage their expectations throughout the project. **(5 Marks)**

c) You are tasked with defining the project scope for the e-commerce website. Describe the process of defining the project scope, including the creation of a Work Breakdown Structure (WBS) and a scope statement. Provide examples of tasks and elements that would be included in your project's WBS. **(6 Marks)**

d) As part of your project planning, you need to establish a project schedule. Explain the steps involved in developing a project schedule. **(4 Marks)**

[Total: 20 Marks]

QUESTION 3.

You are a project manager responsible for implementing a new customer relationship management (CRM) system for a medium-sized company. The project aims to improve customer interactions, streamline sales processes, and enhance data management. You are in the early stages of project implementation.

Required

a) Explain the significance of the project implementation phase in the project management life cycle. Discuss key activities and considerations you need to address during this phase in the context of implementing the CRM system for the company. **(10 Marks)**

b) In your CRM system implementation project, you are working with a cross-functional team comprising members from the IT department, sales, marketing, and customer support. Describe the challenges you might encounter in managing a cross-functional team during project implementation and propose strategies to overcome these challenges. **(5 Marks)**

c) Change management is crucial during the implementation of new systems. Discuss the principles and approaches of change management and explain how you would apply them to ensure a smooth transition for employees and stakeholders when introducing the CRM system.

QUESTION 4.

You are a project manager who has successfully completed the development of a new mobile application for a client. The project involved designing, developing, testing, and launching the app. You have met all the project objectives and completed it on time and within budget. The mobile app is now available to users, and your client is satisfied with the results.

Required

a) Explain the significance of the project completion and evaluation phase in the project management life cycle. What are the key activities and deliverables involved in this phase when concluding the development of the mobile app in your scenario? **(5 Marks)**

b) In your mobile app project, you have implemented a post-implementation review (PIR) process. Describe the purpose of a PIR and provide examples of the questions or criteria you would use to assess the project's success and identify areas for improvement. **(5 Marks)**

c) You have been asked to conduct a financial analysis of your mobile app project. Describe the financial metrics and calculations you would use to evaluate the project's performance, including return on investment (ROI), cost-benefit analysis, and payback period. **(5 Marks)**

d) In your mobile app project, you have identified lessons learned and best practices. Discuss the importance of documenting lessons learned and how this information can be used to improve future projects. Provide examples of lessons learned and how they might be applied to future endeavours. **(5 Marks)**

[Total: 20 Marks]

QUESTION 5.

You are a technical project manager leading the development of a new software product for a technology company. The project involves designing, developing, and launching a cutting-edge software application. You are currently in the development phase of the project.

Required:

a) Explain the role of a technical project manager in a software development project like the one described in the scenario. Discuss the key responsibilities and skills required for success in this role **(5 Marks)**

b) In your software development project, you have encountered a situation where the development team is struggling to meet deadlines and deliverables. Describe the strategies and best practices you would employ to address and mitigate project delays, ensuring the project stays on track.

(5 Marks)

c) Quality assurance is essential in software development. Explain the concepts of quality control and quality assurance in the context of your project. Provide examples of quality control and quality assurance activities that you would implement to ensure the software product meets the required standards.   (5 Marks)

d) Managing a diverse and cross-functional team is a challenge in technical project management. In your scenario, describe how you would ensure effective communication and collaboration among team members with varying technical backgrounds and areas of expertise. (5 Marks)

[Total: 20 Marks]

END OF EXAMINATION