

UNIVERSITY OF FORT HARE
FACULTY OF MANAGEMENT & COMMERCE
BACHELOR of COMMERCE
BACHELOR of COMMERCE in INFORMATION SYSTEMS
DEGREE EXAMINATIONS
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Module Code: IFS312 / IFS312E
Module Name: IS/IT Project Management

Time: 3 HOURS
Marks: 100

This paper consists of 8 pages including the cover page

Internal Examiner
Mr. D. Boucher
Mr. C. Chigamba

External Examiner
Dr. V. Mzazi (UNISA)

INSTRUCTIONS:

1. The paper consists of THREE SECTIONS. Read the instructions that apply to each section carefully.
2. SECTION A consists of 20 critical thinking-type multiple choice questions that need to be answered in your answer book. Match the question number to your chosen letter answer.
3. Read the attached two-page case study on the South African IT Project which is at the end of this paper before attempting to answer SECTION B & C.
4. SECTION B consists of EIGHT 15 mark critical thinking-type questions and you SELECT FOUR to answer, which will total 60 marks. The 1st FOUR answers not cancelled will be marked.
5. SECTION C consists of TWO 20 mark critical thinking-type questions and you SELECT ONE to answer, which will total 20 marks.
6. Number all answers, if an answer is not provided with a visible question number, then it will not be marked in the examination. The order in which SECTIONS and the questions in SECTION B are answered does not matter.
7. Provide well-structured and thoughtful answers to the selected questions by integrating the context of the case study into your answers.
8. Clearly state any assumptions that you make when responding to questions.
9. Bulleted answers received in the examination will be penalized, as students are expected to write narratives (essays), which show understanding and not rote learned work.
10. The value of the mark for each question should be used as a rough guide to the amount of time/content to allocate to answering the question.
11. It is in the students' best interests to write in such a way that their handwriting can be read.
12. At the end of the examination place all answer books inside the first answer book used. Fill in all the covers of all the answer books, and indicate how many were completed.

[TURNOVER THE PAGE]

SECTION A - 20 marks

Note: Write the question number and your choice of answer on a new page in your answer book. Put the heading **SECTION A** at the top of the page.

Mini-Case Study for Section A only:

XYZ Company is a leading software development firm that specializes in creating innovative applications for various industries. The company recently initiated a project to develop a new software solution for a client in the healthcare sector. The project aims to streamline patient data management and improve overall efficiency in healthcare facilities. The project team consists of developers, testers, and project managers, who are responsible for delivering the software within the given timeline and budget.

Multiple Choice Questions:

1. What is the primary objective of the software development project at XYZ Company?
 - a) Increase revenue for XYZ Company
 - b) Improve patient data management in healthcare facilities
 - c) Expand XYZ Company's client base
 - d) Enhance the overall efficiency of software development processes
2. Which role is responsible for coordinating and managing the software development project at XYZ Company?
 - a) Developers
 - b) Testers
 - c) Project managers
 - d) Clients
3. What is the intended outcome of streamlining patient data management in healthcare facilities?
 - a) Improved diagnosis and treatment outcomes
 - b) Reduced software development costs
 - c) Increased software performance
 - d) Enhanced customer satisfaction
4. Why is it important for the project team at XYZ Company to deliver the software within the given timeline and budget?
 - a) To receive positive feedback from the client
 - b) To ensure efficient resource allocation
 - c) To enhance the reputation of XYZ Company
 - d) To maximize profitability for XYZ Company
5. Which knowledge area of project management is primarily associated with coordinating project resources at XYZ Company?
 - a) Time management
 - b) Cost management
 - c) Resource management
 - d) Scope management

6. How can the project team ensure effective communication during the software development project at XYZ Company?
 - a) Establishing a formal reporting structure
 - b) Utilizing project management software tools
 - c) Conducting regular team meetings
 - d) All of the above

7. Which stakeholder group would be most affected by the successful implementation of the software solution developed by XYZ Company?
 - a) Patients
 - b) Developers
 - c) Testers
 - d) Project managers

8. What is the role of project managers in risk management during the software development project at XYZ Company?
 - a) Identifying potential risks and developing mitigation strategies
 - b) Conducting software testing activities
 - c) Ensuring compliance with quality standards
 - d) Monitoring project progress and reporting to stakeholders

9. How can XYZ Company ensure the quality of the software solution developed for the healthcare client?
 - a) Conducting comprehensive testing activities
 - b) Engaging end-users in the development process
 - c) Adhering to industry standards and best practices
 - d) All of the above

10. Which project management process is responsible for defining the scope of work for the software development project at XYZ Company?
 - a) Initiating
 - b) Planning
 - c) Executing
 - d) Monitoring and controlling

11. What is the purpose of conducting a project kickoff meeting at the beginning of the software development project at XYZ Company?
 - a) To introduce the project team to the client
 - b) To establish project objectives and deliverables
 - c) To allocate resources and define project timelines
 - d) To conduct a risk assessment for the project

12. What approach should XYZ Company adopt to ensure effective stakeholder engagement throughout the software development project?
 - a) Regularly communicate project progress and updates to stakeholders
 - b) Engage stakeholders in decision-making processes
 - c) Address stakeholder concerns and issues promptly
 - d) All of the above

13. How can the project team at XYZ Company ensure effective scope management?
 - a) Clearly define project scope and objectives
 - b) Regularly monitor and control changes to the project scope
 - c) Prioritize project requirements based on client needs
 - d) All of the above

14. Which project management knowledge area is responsible for identifying, analyzing, and responding to project risks at XYZ Company?
 - a) Integration management
 - b) Communication management
 - c) Risk management
 - d) Quality management

15. What is the purpose of conducting a lessons learned session at the end of the software development project at XYZ Company?
 - a) To identify areas for improvement in future projects
 - b) To celebrate project success and achievements
 - c) To assess the performance of individual team members
 - d) To prepare a final report for the client

16. How can XYZ Company ensure effective resource management during the software development project?
 - a) Assigning appropriate roles and responsibilities to project team members
 - b) Monitoring and tracking resource utilization
 - c) Addressing resource constraints and conflicts
 - d) All of the above

17. Which project management process is responsible for tracking project progress and making necessary adjustments at XYZ Company?
 - a) Initiating
 - b) Planning
 - c) Monitoring and controlling
 - d) Executing

18. What is the purpose of conducting a project closure meeting at the end of the software development project at XYZ Company?
 - a) To conduct a final review of project performance
 - b) To formally close the project and hand over deliverables to the client
 - c) To evaluate the overall success of the project
 - d) To identify lessons learned for future projects

19. Which knowledge area is primarily concerned with identifying and documenting project requirements at XYZ Company?
 - a) Scope management
 - b) Time management
 - c) Quality management
 - d) Human resource management

20. How can XYZ Company ensure effective risk response planning during the software development project?
 - a) Identifying potential risks and their impacts
 - b) Developing appropriate risk response strategies
 - c) Assigning responsibilities for risk mitigation activities
 - d) All of the above

[END OF SECTION A – TURNOVER FOR SECTION B]

SECTION B - 60 marks

Note: Read the CASE STUDY at the end of this paper and use the context of the case study to support your chosen answers in this section. Put the heading **SECTION B** at the top of the page. Select **FOUR questions to answer** from those provided below. The 1st FOUR answers provided in the answer book for this section will be marked, unless an answer was cancelled, then it will be ignored.

Questions:

1. How can Asiphe successfully manage scope changes and prevent scope creep in the implementation of the ERP system, considering the additional requirements requested by stakeholders? [15]
 2. Discuss the possibility of project management risks that might occur in the ERP implementation project, such as software vendors and data migration, and propose strategies to mitigate these risks. [15]
 3. How can Asiphe effectively manage project costs in the face of unexpected expenses and customization requests during the ERP implementation project? [15]
 4. Discuss the importance of making use of testing (*specifically user acceptance testing*) on the ERP implementation project to overcome resistance to change from end-users. [15]
 5. How can Asiphe ensure effective communication and collaboration among project stakeholders throughout the ERP implementation project, considering the diverse teams involved and the need for timely information sharing? [15]
 6. Identify potential risks that might arise with having a poor project schedule during the ERP implementation project, and propose measures to mitigate these scheduling risks. [15]
 7. Explain to Asiphe how she can make use of the five project management process groups to increase the chance of success in the ERP implementation project. [15]
 8. How can Asiphe successfully manage vendor relationships and procurement activities in the ERP implementation project to ensure the timely delivery of software licenses, hardware components, and professional services? [15]
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[END OF SECTION B – TURNOVER FOR SECTION C]

SECTION C - 20 marks

Note: Read the CASE STUDY at the end of this paper and use the context of the case study to support your chosen answers in this section. Put the heading **SECTION C** at the top of the page. Select **ONE question to answer** from those provided. The 1st answers provided in the answer book for this section will be marked, unless an answer was cancelled, then it will be ignored.

Questions:

1. Discuss the key challenges Asiphe may encounter in managing and motivating differing team members involved in the ERP implementation project. Drawing from the case study, propose strategies and best practices that Asiphe can employ to effectively manage and motivate the project team, ensuring optimal performance and collaboration. *Make contextually relevant assumptions were necessary to support your answer, if the relevant information is not available in the case study.* [20]

OR

2. Discuss the role of effective leadership in managing and motivating teams during the ERP implementation project. Using examples from the case study, analyze the leadership approaches and behaviors exhibited by Asiphe and their impact on team performance and project success. Additionally, propose strategies and techniques that Asiphe could adopt to enhance her leadership effectiveness and team motivation skills. *Make contextually relevant assumptions were necessary to support your answer, if the relevant information is not available in the case study.* [20]

[END OF SECTION C – TURNOVER FOR THE CASE STUDY]

Note: You can detach this case study from the exam paper for easy access and use.

CASE STUDY: South African IT Projectⁱ

Asiphe Ndlovu, an experienced project manager, has been assigned to oversee a high-profile information technology (IT) project in South Africa. The project involves the implementation of a comprehensive enterprise resource planning (ERP) system for a leading manufacturing company. Julius Mani, a prominent business executive, sponsors the project with the objective of improving operational efficiency and streamlining business processes. Asiphe's role is crucial in ensuring the successful completion of the IT project within the allocated budget and timeline.

Initially, the project scope was defined, encompassing the implementation of core ERP modules. However, as the project progressed, additional requirements emerged from various stakeholders, including departments outside the original scope. These scope changes create challenges for Asiphe in managing and balancing the project scope to meet stakeholders' needs while avoiding scope creep and project delays.

The project faces potential delays due to factors such as dependencies on external software vendors, complex data migration, and user training requirements. These delays pose a risk to the project's timeline and may impact business operations. Asiphe needs to develop a comprehensive project schedule, closely monitor progress, and implement strategies to mitigate potential delays.

Managing project costs is crucial for the project's financial viability. Asiphe faces the challenge of ensuring that the project stays within the allocated budget despite unforeseen expenses, such as additional software licenses, hardware upgrades, and customization requests. Implementing effective cost tracking mechanisms and closely monitoring project expenditures are essential for successful cost management.

The success of the ERP implementation relies on delivering a high-quality system that meets the organization's needs. Asiphe must ensure that the implemented solution aligns with industry best practices, follows established quality standards, and addresses stakeholders' requirements. Rigorous testing, user acceptance, and continuous quality assurance are vital to ensure a successful implementation.

The successful implementation of the ERP system requires collaboration and coordination among various teams, including IT specialists, end-users, and project stakeholders. Asiphe faces the challenge of managing the project team effectively, ensuring clear communication, resolving conflicts, and maximizing individual and team performance to meet project objectives.

Effective communication is critical for project success. Asiphe needs to establish clear channels of communication among project stakeholders, including the sponsor, end-users, IT team, and external vendors. Regular project updates, addressing concerns promptly, and fostering a collaborative environment are essential for ensuring smooth communication throughout the project lifecycle.

The ERP implementation project is exposed to various risks, including system compatibility issues, data integrity challenges, and resistance to change from end-users. Asiphe must conduct a comprehensive risk assessment, proactively identify potential risks, and develop mitigation strategies. By closely monitoring risks and implementing appropriate contingency plans, Asiphe aims to minimize project disruptions.

The successful implementation of the ERP system requires the procurement of software licenses, hardware components, and professional services from vendors. Asiphe must navigate the

procurement process, ensuring fair vendor selection, negotiating contracts, and managing vendor relationships. Effective procurement management is crucial to obtain the necessary resources and services for the project's success.

Asiphe Ndlovu faces significant challenges in managing the South African IT project, including scope management, time and cost constraints, quality assurance, human resource coordination, communications, risk mitigation, and procurement. By employing effective project management techniques and leveraging their expertise, Asiphe aims to successfully implement the ERP system, delivering improved operational efficiency and streamlining business processes for the manufacturing company.

[END]

ⁱ Disclaimer: The case study provided in this examination paper has been generated by ChatGPT, an AI language model developed by OpenAI. While the case study aims to simulate a realistic scenario and relevant challenges in the context of IT project management, it is a product of artificial intelligence and does not represent a real-world hospital chain or individuals. Any resemblance to actual organizations or persons is purely coincidental. The content of the case study is intended for educational and illustrative purposes only and should not be interpreted as professional advice or guidance.