

UGANDA MARTYRS UNIVERSITY

UNIVERSITY EXAMINATIONS

FACULTY OF SCIENCE

BSC INFORMATION TECHNOLOGY FINAL EXAMINATION

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION SYSTEMS

MANAGING INFORMATION TECHNOLOGY PROJECTS

THIRD YEAR EXAMINATION FOR BSC INFORMATION TECHNOLOGY

DATE: Thursday December, 13th, 2012

TIME: 9.00 – 12.00 NOON

Instructions:

Read the case study before attempting to answer the questions. Attempt five questions in all.

DO NOT OPEN THIS BOOKLET UNTIL TOLD TO DO SO

Imagine you are an IT Consultant with ManTechConsult Ltd, a leading provider of world class professional IT management services dedicated to providing value added solutions to clients. In this position you are a senior IT Management Consultant having considerable experience and skills in Project acquisition strategy, Project descriptions, Project delivery strategy, great ability to specify a set of standard project deliverables, and good management and communication skills in customer- supplier relationships. Besides, you are well conversant with Project development methodologies and ability to use a set of heuristics in the design of a Project delivery plan.

Give enough thought to Uganda Martyrs University (UMU) - the target domain - in terms of business processes, information, actors and technology. The target domain is divided into Administration, Faculties, Departments, Finance, Registry, Personnel, Library, etc. Recently you signed a contract with UMU to act as a key-link between it (UMU) and external IT suppliers to manage the building of its proposed corporate database application to improve its information needs. With this background in mind now attempt the questions that follow.

1. (a) Mention three (3) major components of project planning. **(3 marks)**
(b) Outline the major activities carried out under each component above. **(11 marks)**
(c) Explain the activities carried out during the whole acquisition process. **(6 marks)**
2. (a) Name three (3) categories of operational items in your target domain with relevant examples for each. **(3 marks)**
(b) Define the target domain in terms of its business processes, information, actors and technology. **(10 marks)**
(c) According to your imagination define the service domain in terms of its service actors and technology. **(3 marks)**
(d) Describe how you would document the initial and final states of your project. **(4 marks)**
3. During project planning you carry out situation and risk analysis.
(a) Mention and describe two (2) situational factors that can cause risks to the business. **(4 marks)**
(b) Mention and describe two (2) situational factors that can cause risks to the project. **(4 marks)**
(c) Mention three (3) risks that can be as a result of either complexity or uncertainty of the target domain and describe each of their impact on the business. **(6 marks)**
(d) Mention three (3) risks that can be as a result of either complexity or uncertainty of the project domain and describe each of their impact on the business or the project. **(6 marks)**

4. During the project delivery strategy design you come up with a number of actions to change individual situational factors and to mitigate risks.
- (a) Mention and explain two (2) actions you would take to change each of the situational factors mentioned in question 3 above. **(8 marks)**
 - (b) Mention and explain two (2) actions you would take to change each of the risks mentioned in question 3 above. **(12 marks)**
5. (a) Describe one development approach you would use for your project giving justifications where appropriate. **(12 marks)**
- (b) Discuss one control approach you would use for your project giving justifications where appropriate. **(8 marks)**
6. (a) Mention three (3) techniques in sequence used during decision points planning. **(3 marks)**
- (b) Mention and explain three (3) major decision types that can be taken at a decision point. **(6 marks)**
- (c) Give brief explanations for each of the following description elements used to describe decision points. **(8 marks)**
- i. Purpose
 - ii. Target domain purpose
 - iii. Service domain purpose
 - iv. Contract domain purpose
 - v. Roles involved
 - vi. Deliverables
 - vii. Organisation and time schedules
 - viii. Cost
- (d) Outline the main contents of a project delivery plan. **(3 marks)**
7. (a) Mention and define three (3) major categories of deliverables that you will need to be specified at the end of your project. **(3 marks)**
- (b) For each of the deliverable category mentioned above mention and define the sub-types of deliverables. **(8 marks)**
- (c) During specification of deliverables, views are used to describe deliverables. Explain what is meant by each of the following views: **(9 marks)**
- i. Business information view
 - ii. Business process view
 - iii. Work practice view
 - iv. Computer system data view
 - v. Computer system function view
 - vi. Computer system architecture view