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, 12th, 2013

TIME: 9.00 – 12.00 NOON

Instructions:
Read the *case* carefully and attempt *five* questions in all. All questions carry equal marks

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The Case

Imagine you have been hired by Uganda Martyrs University (UMU) Steering Committee (SC) to manage its proposed project of developing its third generation of Enterprise Resource Planning system (3gERP) to link students, suppliers, human resources and various knowledge bases within the university. This system is expected to reduce the Total Cost of Ownership for the software, hardware and storage devices within UMU's net technologies and thereby meet UMU's strategic objective of providing quality educational services to students, staff and the community. The 3gERP system project can generally be described as "complex but certain" in terms of processes, information, actors and technologies. Besides, the budget and the schedules for describing, constructing and installing the 3gERP system in UMU can generally be described as "tight". Thus you need to give enough thought to both the target domain and the project domain.

You have a long standing experience, knowledge and skills in project delivery planning techniques, acquisition process management, great ability to specify a set of standard project deliverables, and good management skills in customer- supplier relationships. Besides, you are well conversant with various methodologies, techniques and tools aimed at rapid and cost-efficient development and deployment of enterprise systems. With these strong abilities you are to act as a key-link between UMU' s SC and the project domain experts in managing the proposed development and deployment of UMU's 3gERP system.

With this background in mind now attempt the questions that follow.

1. (a)Mention 4 delivery planning techniques you can use for the project.   (4 marks)
   (b)Explain 6 activities you can execute in acquisition process for the project. (12 marks)
   (c)State 4 issues the project delivery plan can attempt to define in the system. (4 marks)
2. (a) Give 2 examples for each of the following categories of operational items in the target domain: (3 marks)
      i.   System software
      ii. Application software
      iii. physical data
   (b) Define the target domain in terms of its four main properties.   (10 marks)
   (c)Outline 7 elements you can take in documenting final state of the system. (7 marks)
3. During delivery planning you carry out situation and risk analysis for the 3gERP system project.
   (a)State 2 factors from business system that can cause risks to UMU business. (2 marks)
   (b)Describe 2 factors from the process that can cause risks to the project.   (6 marks)
   (c)Describe the impact of 2 risks of the target domain on UMU business.   (6 marks)
   (d)Describe the impact of 2 risks of project domain on the system project.   (6 marks)
4. During the project delivery strategy design for the 3gERP system you come up with a number of actions to change individual complexity and uncertainty factors, and to mitigate risks identified in question 3 above.
   (a) Explain 3 actions you can take to change each situational factor above. (8 marks)
   (b) Explain 3 actions you would take to mitigate each of the risks above.   (12 marks)
5. (a) Describe one development approach you can use for the system project. (12 marks)
   (b) Describe one control approach you can use for the system project.   (8 marks)
6. (a) Mention 2 inputs to decision points planning for the system project.   (2 marks)

(b) Mention 2 results of decision points planning for the system project.   (2 marks)

(c) Explain 3 decision types you can take at a decision point for the project. (10 marks)

(d) Explain procedure you can use to plan decision points for the project.   (10 marks)

7. (a) Mention 5 goals of project domain deliverables for the system project. (5 marks)

(b) Explain 2 types of project domain deliverables for the system project.   (3 marks)

(c) Define 2 contract domain deliverables expected for the system project. (4 marks)

(d) Mention the contents for each of deliverable type mentioned above.   (8 mark)

8. During specification of deliverables, views are used to describe deliverables. Explain how you would utilise the following views in the project.

(a) Business information view   (4 marks)

(b) Business process view   (4 marks)

(c) Work practice view   (4 marks)

(d) Computer system data view   (3 marks)

(e) Computer system function view   (3 marks)

(f) Computer system architecture view   (2 marks)

END