

CIT 401: Software Project Management

Instructions

Time: 3 Hours

Answer QUESTION ONE and any other TWO questions.

QUESTION ONE (30 MKS)

- a) Describe the following terms as used in IT projects
 - i) Risk (2 mks)
 - ii) Network Diagram (2 mks)
 - iii) Project (2 mks)
 - iv) Risk treatment (2 mks)
- b) Discuss the following types of graphical network models
 - i) Activity On Arc (AOA) (3 mks)
 - ii) Activity On Node (AON) (3 mks)
- c) During the scheduling of IT projects, Critical Path Method (CPM), Program Evaluation & Review Technique (PERT) and Graphical Evaluation and Review Technique (GERT) are commonly used. Describe the scenarios under which each of these techniques are applicable.
(6 mks)
- d) There are always cost-time trade-offs in project management. There are often penalties if projects extend beyond some specific date, and a bonus may be provided for early completion. Discuss how crashing may help in this perspective. (4 mks)
- e) Explain why every IT project may need to have a sound project management team in place before any of the SDLC steps can be invoked. (6 mks)

QUESTION TWO (20 MKS)

- a) In order to assess the level of risk in any IT project, likelihood and the impact of incidental occurrences should be estimated. This estimation can be based on experience, standards, experiments or expert advice. Discuss the following types of risk assessments:
 - i) Quantitative (5 mks)
 - ii) Semi-quantitative (5 mks)
 - iii) Qualitative (4 mks)
- b) Describe the SIX steps of IT project management life cycle. (6 mks)

QUESTION THREE (20 MKS)

- a) Briefly describe the following activities as used in IP project management
 - i) Planning (3 mks)
 - ii) Organizing (3 mks)

- iii) Staffing (3 mks)
- iv) Controlling (3 mks)
- b) In managing very big IT projects, various skills, tools and processes are required. Using appropriate examples, discuss each of these requirements. (8 mks)

QUESTION FOUR (20 MKS)

- a) Identity any SIX features that distinguish IT projects from other organization activities. (12 mks)
- b) Describe the FIVE activities that are executed during the project planning phase (8 mks)

QUESTION FIVE (20 MKS)

You have been tasked with the responsibility of leading a team of 10 software engineers to develop an E-learning system for TMU.

- i) Discuss the various steps that you are likely to follow during this exercise (10 mks)
- ii) Describe the various types of project plans that you are likely to develop in the course of this E-learning systems development process. (10 mks)