



CICT PART III SECTION 6

INFORMATION SYSTEMS PROJECT MANAGEMENT

FRIDAY: 30 November 2018.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question.

QUESTION ONE

(a) An information systems project (ISP) could either be considered as a success or as a failure.

Required:

- (i) Summarise four milestones used to determine the success of an ISP. (4 marks)
- (ii) Suggest a technique you could use to validate/verify the test results of each of milestones identified in (a) (i) above. (4 marks)

(b) In each case, examine three code of practice requirements for the information systems' professionals during the following phases of an information system project:

- (i) Development. (2 marks)
- (ii) Implementation. (2 marks)
- (iii) Live system. (2 marks)

(c) ABC Software Limited sells its application software in an overly unpredictable market due to flooding of application software in the market. The selling price for the application software is Sh.50,000.

Assume that the company makes two attempts to penetrate the market. The probability of success during the first and second attempt is 0.6 and 0.3 respectively.

Required:

- (i) Represent the narrative in question (c) above using a probability tree. (2 marks)
- (ii) Calculate the expected value of sales if:
- Both attempts are a success.
 - The first and second attempts are a failure and success respectively.

(4 marks)

(Total: 20 marks)

QUESTION TWO

(a) A business organisation has two information systems projects awaiting management approval. At the moment, the organisation can only afford to finance one project.

Describe two techniques that could be used to help management decide which project to approve. (4 marks)

(b) Summarise three methods that could be used to conduct project quality control reviews. (3 marks)

(c) Describe three circumstances that could lead to merging of projects. (3 marks)

(d) In each case, state two inputs and two outputs used in information system's schedule control. (4 marks)

- (e) Discuss the application of Earned Value Management (EVM) project cost control. (4 marks)
- (f) Distinguish between a challenged project and an impaired project. (2 marks)

(Total: 20 marks)

QUESTION THREE

- (a) Describe four response strategies for positive risks in IS project risk management. (4 marks)
- (b) Examine three tools and techniques used for planning procurements for IS projects. (3 marks)
- (c) Assess the importance of stakeholder analysis in IS project management. (4 marks)
- (d) Explain the role of “interface management” in IS projects integration. (3 marks)
- (e) Describe the procedure for validating the scope of an IS project. (3 marks)
- (f) Summarise three strategies of controlling the time schedules of IS projects. (3 marks)

(Total: 20 marks)

QUESTION FOUR

- (a) (i) Highlight three applications of Program Evaluation and Review Technique (PERT) in IS project. (1 mark)
- (a) (ii) Identify one limitation of PERT in IS project. (4 marks)
- (b) Describe four principles of PRINCE2 project management method. (4 marks)
- (c) Highlight four reasons why it is important for an information systems project manager to provide periodic progress reports to the project team members. (4 marks)
- (d) Describe four standard criteria for assessment of monitoring and evaluation quality. (4 marks)
- (e) ISO certification is a set of international standards for quality management and uniform guidelines for processes and control mechanisms aimed at responding to changing economic realities and global competition. (4 marks)

Required:

Outline four total quality management (TQM) techniques that an organisation might adopt to control the quality of goods and services and monitor its financial results. (4 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) ABC Company Limited intends to manufacture a new product. The major production activities have been identified as shown in table 1 below:

Table 1

Activity	Precedence	Duration (days)
A	-	10
B	-	12
C	-	15
D	A	04
E	A	06
F	B, D, E	05
G	F,C	07

Required:

- (i) Construct a network diagram for ABC Company Limited. (7 marks)
- (ii) Identify the critical path in the production process. (3 marks)
- (b) Assess how the current technological trends affect IS project management practice. (4 marks)
- (c) (i) Describe four characteristics of a matrix organisational structure. (4 marks)
- (c) (ii) State two weaknesses of the organisational structure in (c) (i) above. (2 marks)

(Total: 20 marks)

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