



CICT PART III SECTION 6

INFORMATION SYSTEMS PROJECT MANAGEMENT

FRIDAY: 25 May 2018.

Time Allowed: 3 hours.

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

QUESTION ONE

- (a) Highlight two features of an effective information systems (IS) project communication tool. (2 marks)
- (b) Assess the role of “phase exits” in information systems (IS) project management. (3 marks)
- (c) Evaluate the success or failure of an information system project using the example of implementing ERP software in a company within six months for Sh.50 million. (6 marks)
- (d) Discuss six processes involved in information systems projects integration and governance. (6 marks)
- (e) Outline three reasons for integrated change control. (3 marks)

(Total: 20 marks)

QUESTION TWO

- (a) Highlight two reasons why you might outsource part of a project to an external supplier. (2 marks)
- (b) Estimating for civil engineering projects gives more accurate results than for information systems projects.
Citing four reasons, justify the above statement. (4 marks)
- (c) Information Technology (IT) projects pose more challenges to project managers than other kinds of projects.
Argue the case for the above statement. (4 marks)
- (d) (i) Stakeholder expectations management may be measured using a number of success factors.
Suggest an expectation for each of the following factors: scope, time, cost and technology. (4 marks)
- (ii) For each factor in (d) (i) above, explain a possible guideline for its expectations. (4 marks)
- (e) Summarise four key knowledge areas that form an integral part of the skills set for a project manager. (2 marks)

(Total: 20 marks)

QUESTION THREE

- (a) You are heading a project where users keep asking for changes to the requirements during the development stage.
Discuss strategies of handling the above problem. (6 marks)
- (b) Outline six aspects of a project that need to be tested before the project is handed over to the users. (6 marks)
- (c) Risk exposure provides a measure of relative risk. The table below provides a hazard, its likelihood and impact. Likelihood and impact have been scored out of 12.

| Hazard | Likelihood | Impact | Risk exposure |
|--------|------------|--------|---------------|
| P | 3 | 7 | |
| Q | 4 | 9 | |
| R | 10 | 6 | |
| S | 8 | 5 | |
| T | 4 | 11 | |
| U | 8 | 8 | |

Identify three hazards that should be prioritised.

(3 marks)

- (d) A new IT project has been commissioned in the company you are working for.

Analyse five best practices the company should follow to avoid major scope problems.

(5 marks)

(Total: 20 marks)

QUESTION FOUR

- (a) ABC Company Limited would like to develop an information system (IS) to handle their business operations. The information system would be developed over a period of twelve months. The chief executive officer (CEO) of the company, contractor and staff members of ABC Company Limited would be involved in various tasks during the IS development as indicated below:

- At the beginning of January 2019 to the start of February 2019, the CEO would draw the information systems project (ISP) contract.
- Start of February 2019, the contractor would peruse the contract and recommend for review and amendments to be done up to end of February 2019.
- The CEO amends the contract and offers it for signing at the start of March 2019.
- From the start of March to mid March 2019, the contractor takes staff through briefing and an induction into the process of IS development.
- From mid March 2019 to end of August 2019, the contractor supervises the development and guides the staff as necessary.
- Beginning of September 2019 to end of October 2019, the information system is tested by the contractor and staff as the CEO oversees the process to a successful completion.
- From the beginning of November 2019 to end of November 2019, the contractor implements the IS assisted by the staff. The contractor then trains the staff.
- At the start of December 2019, the contractor rolls out the information system and officially hands over to the CEO.
- The CEO signs acceptance documents and terminates the contract with the developer at the end of December 2019.

Required:

- (i) State the approach of system development used in ABC Company Limited. (1 mark)
- (ii) Highlight four benefits of using such an approach in the information system development. (4 marks)
- (iii) With the aid of a Gantt chart, explain the work breakdown structure of this information system project (ISP). (5 marks)
- (b) Analyse the importance of using critical chain scheduling in information systems project time management. (4 marks)
- (c) Describe three outcomes of quality control process in information systems projects. (6 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) Project teams undergo a series of identifiable stages in the life of a project.

Describe four of these stages.

(4 marks)

- (b) The table below shows the activities of a certain project and the respective durations:

| Activity | A | B | C | D | E | F | G | H |
|------------------|---|----|---|----|---|---|---|---|
| Duration in days | 3 | 10 | 8 | 11 | 1 | 2 | 2 | 1 |

Activities B, C and D can all run simultaneously but are all dependent on activity A.

Activity E is dependent on activities B and C.

Activity F is dependent only on activity C.

Activity G is dependent on activities E and F.

Activity H cannot start until activities D and G are completed.

Required:

- (i) Draw a network diagram for this project. (4 marks)
- (ii) Show the earliest and latest start and end dates and float for each activity. (4 marks)
- (iii) Identify the critical path. (1 mark)
- (iv) Estimate the project duration. (1 mark)
- (c) Assess three ways in which virtual teams negatively affect IT project management. (6 marks)

(Total: 20 marks)