



kasneb

DICT LEVEL III

INFORMATION SYSTEMS PROJECT SKILLS

TUESDAY: 27 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) With the aid of an example, describe two categories of project risk in an information system. (4 marks)
- (b) Estimating is a critical part of project planning that involves a quantitative estimate of project costs, resources and duration.  
**Required:**  
Explain two methods of project estimation. (4 marks)
- (c) Project development staff claim that some of the delays in the project have been caused by the users constantly changing their minds. In many cases, changes have been requested and then subsequently cancelled.  
Discuss how you could manage the above problem. (4 marks)
- (d) The success of a project depends on the cooperation of project development staff.  
Explain how you could create an effective project development team. (4 marks)
- (e) Formulate four questions that should be answered during project startup stage. (4 marks)
- (Total: 20 marks)**

**QUESTION TWO**

- (a) Examine five factors that would increase the probability of a project's success. (5 marks)
- (b) You are selected to be a panelist in recruiting a project manager.  
Highlight five competent skills you would be looking for. (5 marks)
- (c) Conflicts are likely to arise in information technology (IT) projects.  
Describe five general techniques for solving conflicts. (5 marks)
- (d) Summarise five items you should estimate when analysing feasibility of a software project. (5 marks)
- (Total: 20 marks)**

**QUESTION THREE**

- (a) Contrast the following terms as used in project management:
- (i) "Activity" and "merge activity". (4 marks)
- (ii) "Procedures" and "standards". (4 marks)
- (b) Describe the role of programs and portfolio management in information systems (IS) project management. (2 marks)
- (c) Outline three factors leading to the growth of project management offices (PMOs) in information systems (IS) project management. (3 marks)
- (d) Outline three reasons why senior management commitment to the implementation of information systems (IS) project is important. (3 marks)
- (e) Distinguish between "incremental build life cycle model" and "prototyping life cycle model" in the context of information systems project. (4 marks)
- (Total: 20 marks)**

**QUESTION FOUR**

(a) Information technology (IT) project manager at ABC Inc. is new to the task and requires expert guidance from you.

**Required:**

- (i) Explain to the project manager the meaning of “project quality”. (1 mark)
- (ii) Describe three major quality management processes that the project manager should be concerned with. (3 marks)
- (iii) Distinguish between “quality control charts” and “seven run rule”. (2 marks)
- (iv) Explain two dimensions of the cost of quality. (2 marks)

(b) The sales department in your company has their own in-house sales system. The department is being relocated to new offices where it will also have a new server based sales database system.

The information technology (IT) section has outlined a plan for the IT aspects of the move with nine (9) main tasks and estimated duration in weeks as illustrated below:

| Identifier | Activity  | Duration (Wks) |
|------------|---|----------------|
| A          | Order and deliver the new database system                           | 4              |
| B          | Design and install the network infrastructure                       | 7              |
| C          | Order, deliver and install new personal computers (PCs) and printer | 9              |
| D          | Test the database system, server and network                        | 3              |
| E          | Test the PCs with the server and network                            | 2              |
| F          | Copy existing sales data to the new database system                 | 1              |
| G          | Copy other existing PC software to the new PCs                      | 3              |
| H          | Test all software and database on new PCs and server                | 1              |
| I          | Train users   | 2              |

Tasks A, B and C can be undertaken at the same time but tasks A and B must be completed before D can start. Tasks C and D must be completed before E can begin. E must be completed before F and G can start. F and G can be undertaken at the same time but both must be completed before H can start. Task I must follow Task H.

**Required:**

- (i) A network diagram. (6 marks)
  - (ii) A Gantt chart. (4 marks)
  - (iii) Citing a relevant Computer Aided Software Engineering (CASE) tool, state a project task that would require the use of the CASE tool. (2 marks)
- (Total: 20 marks)**

**QUESTION FIVE**

(a) Explain the following concepts used to develop work breakdown structures in information systems projects:

- (i) Analogy approach. (2 marks)
- (ii) Mind mapping. (2 marks)

(b) Summarise four major project planning activities of an information systems development project. (4 marks)

(c) The information asset management teams of an organisation may change from time to time.

Outline four information asset management practices that the management team should adopt to guarantee accountability over the transition. (4 marks)

(d) Negotiation is a tool for information project management practice.

Formulate four guidelines to consider when negotiating. (4 marks)

(e) Explain two factors that might cause delays in completion of an information systems project. (4 marks)

**(Total: 20 marks)**

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