



kasneb

CICT PART III SECTION 6

INFORMATION SYSTEMS PROJECT MANAGEMENT

THURSDAY: 28 November 2019.

Time Allowed: 3 hours.

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

QUESTION ONE

- (a) Summarise six activities involved in managing information systems project. (6 marks)
- (b) Your company's present offices are being closed down and it is moving to a new building nearby. An outline plan for this move has been drawn up with the following main activities.

Identifier	Activity	Duration (months)
A	Inspect the new building and list all data communication facilities	3
B	Order and deliver all data communication facilities	10
C	Identify, order and deliver replacement of PCs, printers and servers	8
D	Order and deliver all required office equipment	11
E	Test new hardware with all communication equipment	1
F	Test new hardware with existing operating and application software	2
G	Test all application software and databases on the new hardware	2
H	Move all staff to new premises	1

NOTE:

- Tasks B, C and D can all run simultaneously but are all dependent on task A.
- Task E is dependent on tasks B and C.
- Task F is dependent only on task C.
- Task G is dependent on tasks E and F.
- Task H cannot start until tasks D and G are completed.

Required:

Draw a Gantt chart for the project to show all task durations, dependencies, free float and critical path. (8 marks)

- (c) Enumerate six techniques for obtaining requirements for an information systems project. (6 marks)
- (Total: 20 marks)

QUESTION TWO

- (a) Describe two techniques for carrying out quality control on a software system during each of the following stages of a project.
- (i) Design. (2 marks)
  - (ii) Build. (2 marks)
  - (iii) Systems integration. (2 marks)
  - (iv) Systems acceptance. (2 marks)
- (b) When significant changes to a project are requested, their impact could be assessed by producing an exception report. Highlight four types of issues that such a report might consider. (4 marks)
- (c) Describe the process by which staff resources are allocated to activities needed for an identified project. (8 marks)
- (Total: 20 marks)

### QUESTION THREE

- (a) Information systems (IS) projects should be formulated primarily to meet the needs of customers.

**Required:**

- (i) Recommend four techniques/strategies that could be adopted by project managers to ensure that IS projects meet customer needs. (4 marks)
- (ii) One of the criteria for ranking information systems projects based on customer requirements is strategic alignment.  
Assess four metrics for IS project ranking. (4 marks)
- (b) Describe four items that should be included in a regular progress report to the project sponsor. (4 marks)
- (c) There are some projects that will be given approval even though the costs exceed the benefits in the business case.  
Discuss the circumstances under which the above might occur. (4 marks)
- (d) Software cost estimation is an activity carried out at various stages during software development process.  
With reference to the above statement:
- (i) State two specific stages at which cost estimates are needed. (2 marks)
- (ii) State two software cost estimation techniques available to the project manager, explaining when each is applicable. (2 marks)

**(Total: 20 marks)**

### QUESTION FOUR

- (a) Project procurement management entails the processes required in the acquisition of goods and services from contracting outsiders through tendering, contracting, purchasing and stock management.

**Required:**

- (i) Explain the essentials of a valid and legally enforceable contract. (4 marks)
- (ii) Describe three methods that could be used to evaluate and select suppliers. (3 marks)
- (iii) Examine the need for standardisation and specification of material to be purchased. (4 marks)
- (b) Discuss the extent to which ICT has impacted on project quality management. (6 marks)
- (c) Highlight three characteristics of a project. (3 marks)

**(Total: 20 marks)**

### QUESTION FIVE

- (a) Your company needs a better stock control system. It has decided to acquire the stock-in package and customise this to meet its requirements. It has set up a project board and you have been appointed the project manager. You will need to assemble and manage a joint team of internal company staff and external technical specialists for the various aspects of this project. It is the first such IT project that your company has undertaken.

**Required:**

- (i) Highlight three team issues that you would expect to deal with during the early stages of the project. (3 marks)
- (ii) Examine how the system customisation is likely to affect the delivery of the stock-in package system. (4 marks)
- (b) In all cases, you could choose to accept risk rather than take any action.  
Describe four situations when accepting a risk might be the best option. (4 marks)
- (c) After the information system project has gone live, you notice that the help desk is getting an increasing number of calls about problems with the new system.  
Examine four possible reasons for increased demand on the help desk. (4 marks)
- (d) Highlight three advantages and two disadvantages of using Gantt Charts for a project plan in comparison with using an activity-on-arrow diagram. (5 marks)

**(Total: 20 marks)**