**PART A**

**INSTRUCTIONS:** Answer **ALL** questions.

**QUESTION 1**

What is cost schedule? List the **THREE (3)** categories of costs that will affect a project management.

**[4 marks]**

**Answer**

Cost schedule is to illustrate the weekly or monthly costs throughout the project, in order to monitor the project progress. (1 mark)

Three categories of cost that affect a project management are:

a. staff costs (1 mark)

b. overheads (1 mark)

c. usage charges (1 mark)

**QUESTION 2**

List **FOUR (4)** differences between contigency plans and the disaster recovery plan.

**[4 marks]**

**Answer**

Four differences between them are:

i. Disaster recovery plan are more managerable with a team and the action are more plan compare with contingency plans, which are more adhoc activities. (1 mark)

ii. Disaster recovery must plan with take a few consideration factors like policies and company rules compare with contingency plans which are observe with all level staff. (1 mark)

iii. Disaster recovery planning essentially follows the same process as the risk management plan, except now you are focusing on the major risks, which cannot be eliminated, mitigated or deflected but not to contingency plans. (1 mark)

iv. Contigeny plans is more to reflect actions or immediate action and disaster recovery also an immediate actions but having proper steps. (1 mark)

**QUESTION 3**

List **FOUR (4)** primary objectives for procurement planning.

**[4 marks]**

**Answer**

Four primary objectives for procurement planning are:

i. Procure all goods/services from a single source. (1 mark)

ii. Procure all goods/services from multiple sources. (1 mark)

iii. Procure only a small portion of the goods/services. (1 mark)

iv. Procure none of the goods/services. (1 mark)

**QUESTION 4**

List **FOUR (4)** reasons why a project considered being failed.

**[4 marks]**

**Answer**

There are several reasons why a project considered being failed but four of them like:

i. Level of Innovation is too low. (1 mark)

ii. Concurrency is developing the product before client's requirements are fully defined. (1 mark)

iii. Misinterpreting the scope of work. (1 mark)

iv. Failing to recognize stakeholder's interests. (1 mark)

**QUESTION 5**

Explain the following terms.

a) Cost benefit analysis

b) Risk evaluation

**[4 marks]**

**Answer**

a. Cost benefit analysis is an assessment based upon the question of whether the estimated costs are exceeded by the estimated income and other benefits. (2 marks)

**b.** Risk evaluation is to evaluate of project risk and to consider each possible outcome and estimate the probability of its occurring and the corresponding value of the outcome. (2 marks)

**QUESTION 6**

What are the diffrences between project termination and project closedown?

**[4 marks]**

**Answer**

The dirrefences between project termination and project closedown are:

i. Most of the project will be closedown after the project is complete when the project goal has been reached. But the project termination mostly is the project was cancelled prematurely. (2 marks)

ii. In project closedown the project team managed and documented their project successfully, but not to the project termination. (2 marks)

**QUESTION 7**

What is procurement and gives **TWO (2)** basic procurement strategies?

**[4 marks]**

**Answer**

Procurement is a process that involves two parties with different objectives who interact in a given market segment. (2 marks)

Two basic procurement strategies are:

i. Corporate procurement strategy (1 mark)

ii. Project procurement strategy (1 mark)

**QUESTION 8**

When a project considered comes to end.

**[4 marks]**

**Answer**

A project considered comes to end when

- Final achievement of the objectives or -1 mark
- Poor initial planning and market prognosis or - 1 mark
- A problem that is too complex for the resources available or - 1 mark
- A better alternative having been found. - 1 mark

**QUESTION 9**

Gives **TWO (2)** differences between completion contracts and term contract.

**[4 marks]**

**Answer**

There are few factors differences between completion contracts and term contract and several of them are:

i. For completion contracts the contract is required to deliver a definitive end product but for term contract the contract is required to deliver a specific "level of effort," not an end product. (2 marks)

ii. In completion contract, upon delivery and formal acceptance by the customer, the contract is considered complete, and final payment can be made but for term contract the effort is expressed in woman/man days over a specific period of time using specified personnel skill levels and facilities. When the contracted effort is performed, the contractor is under no further obligation. Final payment is made, irrespective of what is actually accomplished technically. (2 marks)

**QUESTION 10**

List **FOUR (4)** characteristics of software projects.

**[4 marks]**

**Answer**

**There are few** characteristics of software projects but few of them are:

i. Invisibility. (1 mark)

**iii.** Complexity. (1 mark)

iii. Conformity. (1 mark)

iv. Flexibility. (1 mark)

**PART B**

**INSTRUCTIONS:** Answers **THREE (3)** question only.

**QUESTION 1**

a) What is ISO 9000-3 and list **EIGHT (8)** principles of ISO 9000-3 standard?

**[10 marks]**

**Answer**

ISO 9000-3 is the Guidelines offered by the International Organization for Standardization (ISO), represent implementation of the general methodology of quality management ISO 9000 Standards to the special case of software development and maintenance. (2 marks)

**EIGHT (8)** principles of ISO 9000-3 standard are

| | | |
|---|---|---|
| i. | Customer Focus | (1 mark) |
| ii. | Leadership | (1 mark) |
| iii. | Involvement of People | (1 mark) |
| iv. | Process Approach | (1 mark) |
| v. | System Approach to Management | (1 mark) |
| vi. | Continual Improvement | (1 mark) |
| vii. | Factual Approach to Decision Making | (1 mark) |
| xi. | Mutual Supportive Supplier Relationships | (1 mark) |

(8 marks)

b) Why quality management is an essential part for effective overall project management?

**[10 marks]**

**Answer**

Quality management is an essential part for effective overall project management cause it will increase the criticality of software where as we known the final customer or user is naturally anxious about the general quality of software, especially its reliability. This is increasingly the case as organizations become more dependent on their computer systems and software is used more and more in areas, which are safety critical. Quality management also will give the high intangibility of software where the results of every task can be made tangible by demanding that the developers produce 'deliverables' that can be examined for quality. With approach quality management in project management, the developers can accumulate errors during software development. As computer system development is made up of a number of

steps where the output from one step is the input to the next, the errors in the earlier deliverables will are added to those in the later steps leading to an accumulating effect.

**[Total: 20 marks]**

## QUESTION 2

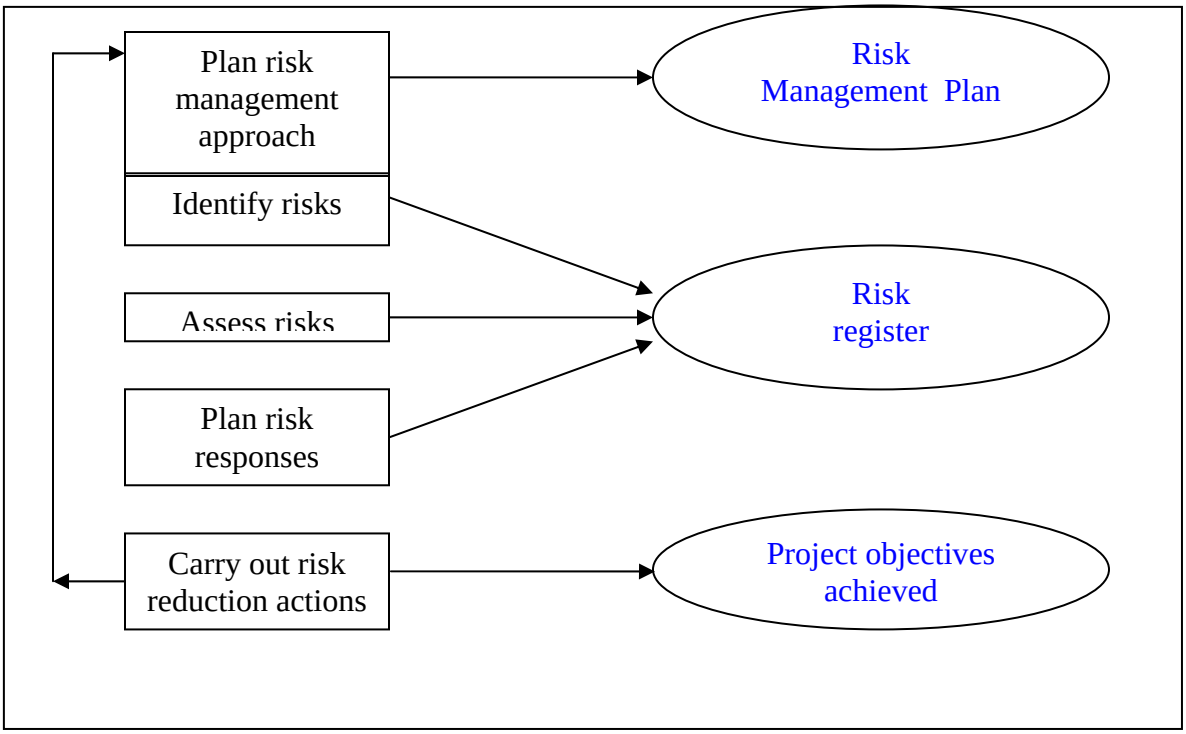
a) What is meant by risk management and draw the processes in risk management.

**[10 marks]**

**Answer**

Risk management means the systematic processes which purpose to tackle risk on our project. Most of the risk management will be documented. (2 marks)

The processes in risk management are: (8 marks)




b) What is disaster recovery plan and when disaster recovery plan could be implemented?

**[10 marks]**

**Answer**

Disaster Recovery Plan is essentially follows the same process as the risk management plan, except now you are focusing on the major risks, which cannot be eliminated, mitigated or deflected. (4 marks)



Disaster Recovery Plan could be implemented when a disaster happens; this is the time to implement developed and updated disaster recovery plan. The first step is to mobilize the disaster recovery team, maybe at a prearranged office where all the necessary office equipment, information and communications are ready. Communicate the disaster recovery plan to all the key people and stakeholders by using the telephone trees (one person rings ten people), this would include:

- Employees
- Clients
- Suppliers
- Media.

If necessary relocate the project office:

- Move to a prearranged office accommodation
- Recover the critical databases that should have been regularly backed up and stored off site. (6 marks)

**[Total: 20 marks]**

**QUESTION 3**

a) List and explain briefly **FIVE (5)** cycles of procurement or contracting system.

**[10 marks]**

**Answer**

**FIVE (5)** cycles of procurement or contracting system are:

i. Requirement cycle: definition of the boundaries of the project

ii. Requisition cycle: analysis of sources

iii. Solicitation cycle: the bidding process

iv. Award cycle: contractor selection and contract award

iv. Contract administration cycle: managing the subcontractor until completion of the contract.

***each point 2 mark*** *= 10 marks*

b) List **FIVE (5)** types of contracts. Which contract is suitable for an e-shopping portal development project? Explain your answer.

**[10 marks]**

**Answer**

**FIVE (5)** types of contracts are:

i. Fixed-price (FP) contract
ii. Cost plus-fixed-fee (CPFF) or cost-plus-percentage-fee CPFF) contract
iii. Guaranteed maximum-shared saving (GMSS) contract
iv. Fixed-price-incentive-fee (FPIF) contract
v. Cost plus-incentive-fee (CPIF) contract *__each point 1 mark__* = *5 marks*

For e-shopping portal development project, Cost plus-incentive-fee (CPIF) contract is quite suitable to implement cause this project like the R & D type and of course it's long-duration project which need rarely changes. Other factor with this contract is, it places more risk on the contractor and forces him to plan ahead carefully and strive to keep costs down. *– 5 marks*

**[Total: 20 marks]**

**QUESTION 4**

a) What is Software Quality Assurance (SQA)? List **SIX (6)** institutes or organizations which issues or control this standard.

**[10 marks]**

**Answer**

Software Quality Assurance (SQA) is standard has been undertaken by several national and international standards institutes, professional and industry-oriented organizations that invest remarkable amount of resources. Few institutes and organizations, among the most prominent developers of SQA and software engineering standards, have gained international reputation in this area. (4 marks)

**Six (6)** institutes or organizations that issues or control this standard are:

- IEEE (Institute of Electrical and Electronics Engineers) Computer Society
- ISO (International Organization for Standardization)
- DOD (US Department of Defense)
- ANSI (American National Standard Institute)
- IEC (International Electrotechnical Commission)
- EIA (Electronic Industries Association) (6 marks)

b) You are a leader of a software development project and you have been asked to closedown this software development project. As such, you need to do the checklist related to that development project before you close it. Please draw or create that checklist in order to be applied to your project closedown.

Answer

The checklist table as below:

| CHECKLIST FOR A COMPLETED PROJECT | DONE | NOT DONE |
|---|---|---|
| ▪ The customer as spelled out has accepted the project or product by the project definition, project specifications, and statement of work.<br>▪ All major milestones and other milestones have been met with all project tasks have been completed in compliance with completion criteria.<br>▪ All follow-up responsibilities, such as customer interface and support, have been identified and resources have been assigned.<br>▪ Project performance reviews or performance contracts have been completed and delivered to the line managers of team members.<br>▪ Team members have been informed of current and future project opportunities.<br>▪ All team members have been reassigned as activities were completed.<br>▪ Final project reports to the customer are complete. | | |

| | | |
|---|---|---|
| ▪ Final project reports to management are complete.<br>▪ Post-project review meetings have been scheduled and held with the customer or client.<br>▪ Final payments have been made to suppliers and subcontractors, including withheld incomplete tasks.<br>▪ Work orders and contracts have been finalized.<br>▪ Final costs have been validated.<br>▪ Agreements have been signed for follow-up customer support.<br>▪ Project history has been documented, including engineering documentation, plan versus actual comparisons, and lessons learned. | | |

**[10 marks]**

**[Total : 20 marks]**

**QUESTION 5**

Given the information in the following table:

| Activity | Duration | Predecessor Activity |
|---|---|---|
| A | 4 | None |
| B | 6 | A |
| C | 4 | A |
| D | 2 | C |
| E | 4 | B |
| F | 5 | B, D |
| G | 3 | C |
| H | 4 | F, G |
| I | 2 | E, H |

Answer all the questions based on the above table:

a) Construct the network diagram

**[8 marks]**

b) Based on your network diagram above for question (a), find:

i. Estimated start time (EST) for each activity in the diagram.

**Answer**

*2 days* *[2 marks]*

ii. Elapsed time for the completion of the development project.

**Answer**

*2 days* *[2 marks]*

**[4 marks]**

c) Identify all the paths. Which path is the critical path? **[3 marks]**

**Answer**

**A-C-D-F-H-I** is the critical path



d) Calculate the slack time for each activity. **[3 marks]**

**Answer**

| Activity | Predecessor Activity | Slack Time |
|---|---|---|
| **A** | None | none |
| B | A | 1 |
| **C** | A | 1 |
| **D** | C | 2 |
| E | B | 2 |
| **F** | B, D | 1 |
| G | C | 1 |
| **H** | F, G | 1 |
| **I** | E, H | 2 |

e) How long will it take to complete the project? **[2 marks]**

**Answer**

*18 days*

**[Total : 20 marks]**

**THE QUESTION PAPER ENDS HERE**