

THE UNIVERSITY OF DODOMA
COLLEGE OF INFORMATICS AND VIRTUAL EDUCATION
DEPARTMENT OF INFORMATION SYSTEMS
AND TECHNOLOGY



UNDERGRADUATE UNIVERSITY
EXAMINATIONS

FIRST SEMESTER 2019/2020

BT 310: ICT PROJECT MANAGEMENT

Date: 20th February, 2020

Time Allocated: 3 Hours

Start: 11:45 AM

End: 14:45 PM

Instructions:

1. This question paper consists of two sections: A and B.
2. Answer ALL questions in Section A and TWO questions from Section B (Question Five (5) is compulsory)
3. All University of Dodoma examination regulations apply.

SECTION A (50 Marks)

Question One

Several professional people like psychologists, managers, coworkers, teachers, parents, and most people in general struggle to understand what motivates people to do what they do. Briefly explain the following motivation theories based on Information and Communication Technology Project Management:

[2.5Marks Each]

- i. Maslow's Hierarchy of Needs Theory,
- ii. Herzberg's Motivation-Hygiene Theory,
- iii. McClelland's Acquired-Needs Theory,
- iv. McGregor's Theory X and Theory Y

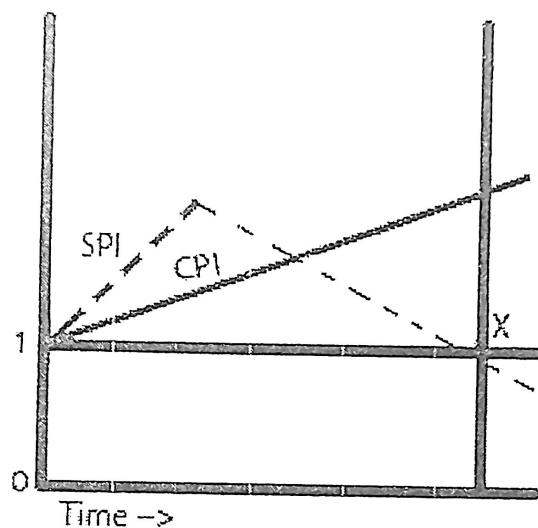
Question Two

Choose the most correct answer, and indicate your answers in capital letters only in the provided space. [1 Mark Each]

- i. When dealing with stakeholders, all the following statements are correct EXCEPT:
 - a) Project manager must try to satisfy even the implicit requirements of stakeholders.
 - b) Only those stakeholders who are project team members should be involved in the creation of project plan.

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- c) Both stated and unstated needs of stakeholders should be properly identified
 - d) Some stakeholders may provide conflicting requirements.
- ii. The following statements about stakeholders are correct EXCEPT:
- a) Stakeholders may exert influence over the project.
 - b) Stakeholders' responsibilities remain stable throughout the project life cycle.
 - c) Some stakeholders benefit from a successful project.
 - d) Identifying stakeholders can be difficult.
- iii. You are the project manager responsible for developing a software application based on customer requirements. Which technique do you use in order to consider the customer's change request?
- a) Additional planning
 - b) Expert judgment
 - c) Project selection methods
 - d) Corrective action

iv. Please refer to the diagram given below



At time x, the project is :

- a) Behind schedule, over-budget
- b) Behind schedule, under-budget
- c) Ahead of schedule, over-budget
- d) Ahead of schedule, under-budget

v. TCPI based on the BAC:

- a) $(BAC+EV) \div (BAC-AC)$
- b) $(BAC-EV) \div (BAC-AC)$
- c) $(BAC-EV) \div (EAC+EV)$
- d) $(BAC-EV) \div (EAC-EV)$

vi. TCPI based on the EAC:

- a) $(BAC+EV) \div (BAC-EV)$
- b) $(BAC-EV) \div (EAC-EV)$
- c) $(BAC-EV) \div (EAC+EV)$
- d) $(BAC-EV) \div (BAC-AC)$

vii. At a company where the design of a new amplifier for a telecommunications project needs to be outsourced. The project team is arguing about the prospective sellers who have submitted proposals. One team member argues for a certain seller while another team member wants the project to be awarded to a different seller. The best thing the project manager should remind the team to focus on in order to make a selection is the:

- a) Procurement documents.
- b) Procurement management plan.
- c) Procurements audits.
- d) Source selection criteria

viii. Your company is engaged in a project that requires the selection of a software development company to program a key component of your product. Which of the following is the best thing for a project manager to do in the Conduct Procurements process?

- a) Answer sellers' questions about the procurement documents.
- b) Select a contract type.
- c) Evaluate risks.
- d) Perform market research.

- ix. What is the top reason for global outsourcing of IT services?
- cost reduction
 - a shortage of qualified personnel
 - decreasing time to market
 - increasing revenues
- x. You have just completed a project that involved a supplier that met all of your project requirements. As part of the records management system, you are trying to make sure all records from the procurement are documented and indexed. Which of the following do you not have to worry about?
- Procurement statement of work
 - Proposal
 - Negotiations process
 - Terms and conditions

Question Three

- a) Match the following knowledge areas in relatively appropriate sequence or order to be considered in IT project management

[1 Marks Each]

| Order | Knowledge areas |
|-----------|---------------------------------------|
| i. | A1. Project Procurement Management |
| ii. | A2. Project Communications Management |
| iii. | A3. Project Risk Management |

| | |
|------------|---------------------------------------|
| iv. | A4. Project Stakeholder Management |
| v. | A5. Project Human Resource Management |
| vi. | A6. Project Quality Management |
| vii. | A7. Project Cost Management |
| viii. | A8. Project Scope Management |
| ix. | A9. Project Integration Management |
| x. | A10. Project Time Management |

- b) In the give Table below, provide the correct horizontal sequence using letters of the given processes [4 Marks]

| | | |
|--------------------------------------|-------------------|----------------------------------|
| A. Perform Qualitative Risk Analysis | B. Identify Risks | C. Perform Quantitative Analysis |
| D. Plan Risk Responses | E. Control Risks | F. Plan Risk Management |

- c) Match each of the following elements to a Work Breakdown Structure (WBS), Product Breakdown Structure (PBS) or a Project Schedule (PS) by filling in the table cell with the proper indicator—“WBS”, “PBS” or "PS" [1 Marks Each]

| | |
|------------|---------|
| Milestones | B1. ... |
|------------|---------|

| | |
|--------------------------------------|---------|
| Tasks | B2. ... |
| Project architecture design | B3. ... |
| Project architecture design | B4. ... |
| the project manager's responsibility | B5. ... |
| systems engineer's responsibility | B6. ... |
| Life cycle phases | B7. ... |

Question Four

Read the following questions carefully and fill the blanks with a short answer on the provided answer sheet. **[1.5 Marks Each]**

- i. motivation causes people to participate in an activity for neither their own enjoyment nor hobby.
- ii. is defined as a group of related projects, subprograms, and program activities managed in a coordinated way to obtain benefits not available from managing them individually.
- iii. is a statement which provides documented basis for making future project decisions and for confirming or developing common understanding of the project scope among the stakeholders.
- iv. describes how things should be done, and different organizations often have different ways of

doing things.

v. can be identified as the official, written acknowledgment and recognition that a project exists, issued by senior management and gives authority to project manager to assign organizational resources.

vi. An uncontrolled scope can also be identified as

SECTION B (50 Marks)

Question Five

Madam Amina has established a small IT company. The company needs to update and extend its existing time recording system. Assume that you are the project manager of the company and have drawn up an outline project plan for the main project activities, as follows:

| Activity | | Duration (weeks) | Dependent on |
|----------|--|------------------|--------------|
| A | Draw up and agree requirements | 4 | None |
| B | Select and order additional hardware | 4 | A |
| C | Develop and unit test new software | 12 | A |
| D | Install and test additional hardware | 4 | B |
| E | Test hardware backup and security procedures | 4 | D |

| | | | | |
|----------|--------------------------------------|---|---------|--|
| F | Document new software | 4 | C | |
| G | Install new software and system test | 6 | C, D | |
| H | Deploy live the system | 2 | E, F, G | |

- i. Draw a fully analyzed activity-on-node network diagram for this project [6 Marks]
- ii. Use a standard node convention, to display the duration, the earliest and latest start and end dates and the float for each activity [10 Marks]
- iii. Name, and display on the network diagram, the critical path and state the minimum duration, in weeks [3 Marks]
- iv. Draw a Gantt chart for the project to show clearly its progress [6 Marks]

Question Six

Assume that your organization wants to hire new instructors for your project management course.

- i. Develop a list of at least five quality standards that you could use in making this hiring decision [7.5 Marks]
- ii. Suppose that some current instructors do not meet these standards. Provide suggestions for how you would handle this situation. [7.5 Marks]
- iii. List and explain very briefly the four main criteria for assessing the success of a project [4 Marks]
- iv. Identify four different options that are available for bringing such a project back on schedule when it has been found to

be running late. Explain the cost implications of each of these options. [6 Marks]

Question Seven

- i. IT project managers are expected to possess certain skills or attributes. Describe four skills (things they can do) or attributes (characteristics they possess) of good IT project managers. [8 Marks]
- ii. IT project managers can employ a number of management styles. Two such styles are known as “autocratic”, which is often preferable when most of the project staff are new to a project, and “democratic”, where most of the project staff are more experienced and are able to contribute to the decision-making process. Discuss two advantages and two disadvantages of each of these styles. [9 Marks]
- iii. An IT project has been running well for 6 months. The IT project manager then notices a decrease in the efficiency and performance of the project team. Describe at least four steps they could take to deal with this situation. [8 Marks]