



UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2013/2014 – 2nd Year Examination – Semester 4

IT4204: IT Project Management
PART 1- Multiple Choice Question Paper

19th July, 2014
(ONE HOUR)

Important Instructions :

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- The paper has **24 questions** on **06 pages**.
- All questions are of the MCQ (Multiple Choice Questions) type.
- All questions should be answered.
- Each question will have 5 (five) choices with **one or more** correct answers.
- All questions will carry equal marks.
- There will be a penalty for incorrect responses to discourage guessing.
- The mark given for a question will vary from 0 to +1 (*All the correct choices are marked & no incorrect choices are marked*).
- Answers should be marked on the special answer sheet provided.
- Note that questions appear on both sides of the paper.
If a page is not printed, please inform the supervisor immediately.
- Mark the correct choices on the question paper first and then transfer them to the given answer sheet which will be machine marked. **Please completely read and follow the instructions given on the other side of the answer sheet before you shade your correct choices.**

1. Who is responsible for **quality** in a project?

(a) Project Manager	(b) Programmers	(c) System Analysts
(d) Team Leaders	(e) Quality Assurance Engineers	

2. The project scope statement is created within the

(a) initiation phase.	(b) planning phase.
(c) execution phase.	(d) monitoring and controlling phases.
(e) testing phase.	

3. Which of the following factors could be used to decide whether a project is successful ?

(a) Amount of money spent on the project	(b) Stakeholder satisfaction
(c) Meeting the project objectives	(d) Meeting an agreed budget
(e) Delivering on time	

4. Which of the following is/are contained on a project charter?

(a) schedule	(b) scope
(c) cost	(d) system test data
(e) Stakeholder contact details	

5. A Project life cycle includes

(a) Project Initiation.	(b) Project Planning.
(c) Project Execution.	(d) Project Monitoring.
(e) Project Closure.	

6. Which of the following measures can be taken to avoid social loafing ?

(a) Identifying individual performance and assigning tasks accordingly
(b) Monitoring team members
(c) Making groups with members having diverse skills and talents
(d) Increasing the group size
(e) Maintaining group cohesiveness

7. Which of the following factors is/are considered as the triple constraints of a project ?

(a) scope, time and cost	(b) stakeholder satisfaction, cost and time
(c) time, quality and benefit	(d) schedule, quality and profit
(e) profit, cost and effort	

8. Which of the following are software quality characteristics recognized by ISO 9126?

(a) functionality	(b) reliability
(c) usability	(d) efficiency
(e) maintainability	

9. According to the Maslow's hierarchy of needs, the most important need is

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| (a) esteem. | (b) association. |
| (c) survival. | (d) physiological satisfaction. |
| (e) resource allocation. | |

10. Which of the following is/are correct ?

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| (a) A Gantt Chart gives a visual representation of task durations. |
| (b) A Network Chart gives a visual representation of dependencies between tasks. |
| (c) A Gantt Chart displays the project activities and their start and finish in calendar dates. |
| (d) A Network Chart is a diagram that is drawn before the work breakdown structure. |
| (e) A Gantt Chart visually shows the slack time. |

11. Select the correct statements regarding the rules of activity-on-arrow network charts.

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| (a) A network chart can have only one start node and only one end node. |
| (b) Nodes have duration. |
| (c) Nodes have no duration. |
| (d) Dummy activities are not used in activity-on-arrow network charts. |
| (e) A network may not contain loops. |

12. Activities that could be done in parallel are more visible in a/an

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| (a) Gantt chart. |
| (b) Resource histogram. |
| (c) Activity-on-arrow network chart. |
| (d) Activity-on-node network chart. |
| (e) Work breakdown structure. |

13. Consider the two columns given below;

<i>Column 1</i>	<i>Column 2</i>
A : Critical Path is	P : evaluates the LST and LFT of each activity.
B : Float is	Q : the minimum duration to complete the project.
C : Forward pass method is	R : an activity with zero duration.
D : Backward pass method is	S : an important event with zero duration.
E : A milestone is	T : calculates the EST and EFT of each activity.
F : A dummy activity is	U : the time with which an activity may be delayed.

A correct matching between them is

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|-----------|-------|-------|-------|-------|-------|
| (a) A - Q | B - R | C - T | D - P | E - U | F - S |
| (b) A - T | B - U | C - P | D - Q | E - S | F - R |
| (c) A - P | B - U | C - Q | D - T | E - S | F - R |
| (d) A - Q | B - U | C - T | D - P | E - S | F - R |
| (e) A - T | B - Q | C - S | D - P | E - U | F - R |

14. Select the correct statement/(s) regarding the dummy activities used in activity-on-arrow network charts.

- (a) Dummy activities are shown as dotted lines on the network diagram.
- (b) Dummy activities use no resources.
- (c) Dummy activities are compulsory in all network charts.
- (d) Dummy activities have zero durations.
- (e) Dummy activities are used in cases, where two activities share the same start and end nodes.

15. Identify the correct statement/(s) with respect to cost estimations.

- (a) Bottom-up estimation is getting expert assistance.
- (b) Estimating individual work and amalgamating individual work to get the total project cost is called top-down estimation.
- (c) To estimate the cost of a project, parametric modelling uses project characteristics in a mathematical model.
- (d) The actual cost of similar projects are used in bottom-up estimates to estimate the cost of a new project.
- (e) In some parametric models, the number of function points is used.

16. Some project management functions are given below.

- A2 : Draw WBS
- B6 : Draw Network Diagram
- C7 : Risk Analysis
- D5 : Cost Estimation
- E4 : Draw Gantt Chart
- F3 : Draw WBS
- G8 : Monitor and Control
- H1 : Define Scope of Project

Identify the correct execution order of these functions.

- (a) A,B,C,D,E,F,G,H
- (b) H,A,F,E,D,B,C,G
- (c) H,G,F,E,D,C,B,A
- (d) B,A,D,C,F,E,H,G
- (e) B,C,A,D,E,F,H,G

17. It is estimated that a project costs Rs. 9,900.00. A critical activity of this project can be reduced by one week at the cost of Rs. 50.00 per day. Reducing the project duration by one week will save Rs. 160 per day. Assuming that a week has five working days, how much would the organization save by reducing the project by one week ?

- (a) SLR 110
- (b) SLR 550
- (c) SLR 9,350
- (d) SLR 900
- (e) SLR 250

18. You are asked to develop a microprocessor based highly critical mission control system. This system needs an innovative data processing architecture and algorithms. It is estimated that this system needs 500,000 delivered source code instructions. What is the nominal effort estimation in Man Months ?

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| (a) $3.2(500000)^{1.05}$ | (b) $3.0(500000)^{1.12}$ |
| (c) $2.8(500000)^{1.20}$ | (d) $2.8(500)^{1.20}$ |
| (e) $3.2(50)^{1.20}$ | |

19. Relevant cost drivers for a project are as follows:

Software reliability	1.15
Database size	1.16
Product complexity	1.30

What is the effort adjustment factor ?

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| (a) 1.15 | (b) 1.16 |
| (c) 1.30 | (d) 3.61 |
| (e) 1.73 | |

20. Identify the correct statement/(s) related to the risk management of projects.

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| (a) Some of the steps of risk management are risk identification, qualitative analysis, quantitative analysis and risk monitoring. |
| (b) The Risk Register is a document to track the management of risks. |
| (c) Fishbone or Ishikawa diagrams are not used for risk identification. |
| (d) Qualitative risk analysis is to identify risks as significant or insignificant. |
| (e) If a risk is deemed to be high, it needs thorough attention. |

21. Pareto analysis

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| (a) is a statistical tool in decision making that is used for the selection of a limited number of tasks that produce significant overall effects. |
| (b) is also known as the 80/20 rule. |
| (c) could be used for quality improvement. |
| (d) Implies that you are supposed to draw another line chart with time on x-axis and frequency on y-axis. |
| (e) often illustrates the lack of symmetry that usually appears between work put in and results achieved. |

22. Which of the following belong to the Deming's fourteen points for Project Management ?

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| (a) Dependence on inspection to achieve quality |
| (b) Improving every process constantly and forever |
| (c) Institute training on the job |
| (d) Adopt and institute leadership |
| (e) Make barriers between staff areas |

23. Consider the following work breakdown table of a project. The manpower requirement of each activity is also given. What is the total man power requirement of the project in the third month ?

Activity	Duration (months)	Precedents	Manpower requirement
A	5	-	12
B	6	-	4
C	8	-	6
D	7	A	3
E	4	B, C	8

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| (a) 12 | (b) 16 | (c) 6 |
| (d) 22 | (e) 33 | |

24. Your organization has decided to implement a payroll system. Five proposals have been given by payroll system developers. Three criteria are to be used for the evaluation. These criteria are, meeting the key business objectives, customer support extended by the developers, and possibility of completing the project within the allocated budget. The weights assigned to the first two criteria are 50% and 20% respectively. The following table shows the scores (0-100) given to each of these proposals for meeting the three criteria.

	<i>Proposal A</i>	<i>Proposal B</i>	<i>Proposal C</i>	<i>Proposal D</i>	<i>Proposal E</i>
Meet key business objectives	90	90	50	70	100
Has strong customer support	50	90	50	40	100
Possible to meet within the budget	20	50	50	100	25

According to the given evaluation criteria, the best proposal is

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| (a) Project A. | (b) Project B. | (c) Project C. |
| (d) Project D. | (e) Project E. | |

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