UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)
Academic Year 2016 – 2nd Year Examination – Semester 4

IT4205 – IT Project Management
Part 1 - *Multiple Choice Question Paper*
01st October, 2016
(ONE HOUR)

Important Instructions :

- The duration of the paper is **1 (one) hour**.

- The medium of instruction and questions is English.

- The paper has **30 questions** on **07 pages**.

- All questions are of the MCQ (Multiple Choice Questions) type.

- All questions should be answered.

- Each question will have 5 (five) choices with **<u>one or more</u>** 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 (*All the incorrect choices are marked & no correct choices are marked*) 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) What are the four characteristics of software projects which make them particularly difficult when compared with other types of projects?

(a) Interoperability, Security, Robustness, Flexibility

(b) Security, Robustness, Platform-independent, Conformity

(c) Invisibility, Complexity, Conformity, Flexibility

(d) Efficiency, Maintainability, Reliability, Flexibility

(e) Invisibility, Complexity, Efficiency, Maintainability

2) Consider the following statements.

(i) It is difficult to elicit precise requirements from voluntary users of a system as opposed to a business system.
(ii) When developing systems for voluntary users, requirement elicitation depends on other techniques such as market surveys, focus groups and prototype evaluations.
(iii) Point of sales system in a supermarket is an example for a system that involves voluntary users.

Which of the above statements is/are **true** with respect to requirement elicitation?

(a) (i) and (ii) only | (b) (i) and (iii) only | (c) (ii) and (iii) only

(d) (iii) only | (e) (i), (ii) and (iii) only

3) Consider the following statements.

(i) A project is an unplanned activity with a goal.
(ii) Projects are non-routine activities.
(iii) Producing an edition of a newspaper can be considered as an example for a project.

Which of the following statements is/are **true** with respect to projects in general?

(a) (i) and (ii) only | (b) (i) and (iii) only | (c) (ii) and (iii) only

(d) (ii) only | (e) (iii) only

4) Integration management is regarded as the knowledge area that affects and is affected by the other project management knowledge areas. Select the tools and techniques available for the project manager for the integration management knowledge area.

(a) Stakeholder analysis, Change Management, Lessons learned reports

(b) Gantt charts, Project selection methods, Change requests

(c) Change control boards, Project charters, Project review meetings

(d) Project management software, Quality metrics, Cost baselines

(e) Risk registers, Project management plans, Scope change controls

5) Which of the following techniques can be used to compare projects on the basis of their respective cash flow forecasts?

(a) Net Profit	(b) Return on Investment	(c) Internal Rate of Return
(d) Cost-benefit Analysis	(e) General Ledger	

6) The payback period is another technique used to evaluate projects based on their cash flow forecasts. What are the main disadvantages of payback period as an evaluation technique?

(a) The technique ignores the overall profitability of the project.

(b) It is difficult to compute.

(c) It not particularly sensitive to small forecasting errors.

(d) It ignores any income (or expenditure) once the project has broken even.

(e) It requires a significant amount of past data (> 10 years) to compute accurately.

For questions 7 – 10, consider the following table that consists of cash flow projections of 4 projects.

Year	Project 1	Project 2	Project 3	Project 4
0	-100,000	-1,000,000	-100,000	-120,000
1	10,000	200,000	30,000	30,000
2	10,000	200,000	30,000	30,000
3	10,000	200,000	30,000	30,000
4	20,000	200,000	30,000	30,000
5	100,000	300,000	30,000	75,000

Table 1: Projected cash flows of four projects ($)

7) According to "Net Profit" computations, which project(s) is (are) equally selectable?

(a) Project 1	(b) Project 2	(c) Project 3
(d) Project 4	(e) Project 1 and Project 4	

8) According to the "Payback Period" computations, which project(s) is (are) selectable?

(a) Project 1	(b) Project 2	(c) Project 3
(d) Project 4	(e) More than one project is equally preferable.	

9) According to the "Return on Investment" computation, which projects(s) is (are) selectable?

(a) Project 1	(b) Project 2	(c) Project 3
(d) Project 4	(e) More than one project is equally preferable.	

10) Which of the following statements is/are accurate about the four projects in Table 1?

> (a) When considering the "Net Profit", it is far better to invest in Project 1, 3 and 4 at once and gain a higher profit rather than investing $ 1,000,000 on Project 2.
> (b) According to the "Net Present Value" using a 10% discount rate, Project 2 is not worth considering and Project 4 provides the greatest returns.
> (c) Returns received by Project 1 and Project 3 when considering the "Net Present Value" using a 10% discount rate is equal.
> (d) "Net Present Value" is a sufficient evaluation technique in this context to identify which of the four project are most beneficial to pursue.
> (e) Returns received by Project 2 and Project 4 when considering the "Net Present Value" using a 10% discount rate is equal.

11) Which of the following statements is/are true regarding qualitative and quantitative risk analysis?

> (a) The nature of the project and the availability of time and money affect the type of risk analysis techniques used.
> (b) Quantitative risk analysis often follows qualitative risk analysis.
> (c) The qualitative and the quantitative risk analysis processes have to be performed together for all projects.
> (d) Decision trees is a diagrammatic technique used to help select the best course of action in situations where future outcomes are uncertain.
> (e) Monte Carlo analysis can predict the probability of finishing a project by a certain date or the probability that the cost will be equal to or less than a certain value.

12) Which of the following clearly defines the term "risk tolerance"?

> (a) the amount of risk a company can afford
> (b) the amount of money the company can afford considering its finances
> (c) the balance between the risk and payoff of a given project
> (d) the amount of satisfaction or pleasure received from a potential payoff
> (e) the amount of risk an individual can take before declaring bankruptcy

13) In information technology projects "smoke testing" is a common occurrence. Which of the following statements clearly defines smoke testing?

> (a) It is a test that ensures that a subset(s) of a given system is as defect free as possible.
> (b) It is a test that ensures that each individual component is as defect free as possible.
> (c) It is a test that ensures that the entire system is working properly.
> (d) It is a test that focuses on the business fit of the system to the organization, rather than technical aspects.
> (e) It is a test that is used to reveal simple failures of the system that are severe enough to stop or postpone a software release.

14) | In network diagrams, what is meant by a burst and a merge?

> (a) Burst and a merge mean the starting and an ending points of activities.
> (b) Burst occurs when two or more activities follow a single node whilst merge occurs when two or more activities precede a single node.
> (c) Number of arrows originating from all the activities are called a burst whilst the number of arrows ending at all the activities are called a merge.
> (d) Burst and merge refer to a single entity in a diagram that has no duration and no resources but are occasionally required to show logical relationships.
> (e) Burst is another name used for an originating activity whilst merge is another name used for an ending activity.

15) | Which of the following statements is/are true about the PERT technique?

> (a) PERT technique uses a three (03) step method to compute the probability of meeting or missing a target date.
> (b) Chi-square values are used to estimate the probability in PERT technique.
> (c) If a network diagram of a project has six (6) activities and eight (8) transitions, the corresponding PERT network too has a similar structure.
> (d) PERT was initially developed to take account of the uncertainty surrounding estimates of task durations.
> (e) As opposed to the CPM network that utilizes a single time estimate, PERT requires three time estimates for tasks.

16) | According to Thamhain and Wilemon's influence of power, which of the following accurately lists out the influence bases available to a project manager?

> (a) Authority, Friendship, Money
> (b) Budget, Expertise, Work Challenge
> (c) Penalty, Promotion, Assignment
> (d) Friendship, Reward Power, Expert Power
> (e) Coercive power, Legitimate Power, Referent Power

17) | Which of the following represent approaches that one could utilize to develop a work breakdown structure (WBS)?

> (a) Analogy Approach (b) Top-down Approach (c) Mind Mapping Approach
> (d) Expert Analysis Approach (e) First Come First Serve Approach

18) | Which of the following are **not** activity-on-arrow network rules and conventions?

> (a) Nodes are numbered sequentially
> (b) Time moves from left to right
> (c) A node has a duration
> (d) A project network can have multiple end nodes
> (e) A project network can have multiple start nodes

19) Which of the following represent frames of an organization?

(a) Structural Frame   (b) Human Resources Frame   (c) Political Frame

(d) Embryonic Frame   (e) Symbolic Frame

20) Which of the following represent characteristics of organizational culture?

(a) Member identity

(b) Integration of modules

(c) Means-ends orientation

(d) Conflict resolution

(e) Open-systems focus

21) According to Raven's study, which of the following represent bases of social power?

(a) Authority

(b) Assignment

(c) Legitimate power

(d) Expertise

(e) Experience

22) Which of the following represent social profiling tools?

(a) Myers and Briggs Model   (b) Social styles profiler   (c) DISC profiles

(d) IQ tests   (e) Standardized tests

23) Which of the following represent dysfunctions of a team?

(a) Absence of trust   (b) Common goal   (c) Lack of commitment

(d) Accountability   (e) Conflict resolution

24) According to Blake and Mouton's modes for handling conflicts, what is meant by the forcing mode?

(a) Project managers directly face a conflict using a problem-solving approach that allows affected parties to work through their disagreements.

(b) Project managers use a give and take approach for resolving conflicts.

(c) Project managers de-emphasize or avoid areas of difference and emphasize areas of agreement.

(d) Project managers exert their viewpoint at the potential expense of another viewpoint.

(e) Project managers retreat or withdraw from an actual or potential disagreement.

25) Which option below properly lists out risks associated with the "cost" knowledge area?

(a) Inadequate planning, poor resource allocation

(b) Poor conflict management, absence of leadership

(c) Substandard design, poor attitude towards quality

(d) Errors in determining critical path, poor slack management

(e) Inadequate productivity or contingency, estimation errors

26) What is a risk register?

(a) It is a document that contains results of various risk management processes.

(b) It is a document that has indicators or symptoms of actual risk.

(c) It is a document that has the name of the stakeholders responsible for the risk event.

(d) It is document regarding a specific event that occurred during the project.

(e) It is a document that has risk avoidance strategies for all future risks.

27) Which of the following is **not** a basic response strategy for negative risks?

(a) Risk avoidance   (b) Risk sharing   (c) Risk mitigation

(d) Risk transference   (e) Risk exploitation

28) What are residual risks?

(a) These are risks that remain after all of the response strategies have been implemented.

(b) It is a direct result of implementing a risk response.

(c) It is the direct result of allocating the ownership of the risk to another party.

(d) These are risk mitigating events by reducing the probability of its occurrence.

(e) It is the task of mitigating current risk of the project by importing more risk to the project.

29) What is meant by *mirroring* in human resource management?

(a) managing a project with relation to harmony, conformity, accord and affinity

(b) converting a person into a different role

(c) duplicating work done by a person and making him redundant

(d) matching certain behaviors of other people

(e) duplicating a project

30) What is meant by a critical path in a project?

(a) It includes the most risky activities of a project.

(b) It is the shortest path through the network diagram.

(c) It is a measure of time with respect to a given project.

(d) It is the series of activities that determine the earliest time by which the project can be completed.

(e) It is the slack free path of the project.

******