



UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

**DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY ( EXTERNAL)**

*Academic Year 2017 – 2<sup>nd</sup> Year Examination – Semester 4*

***IT4205 – IT Project Management***

***Part 1 - Multiple Choice Question Paper***

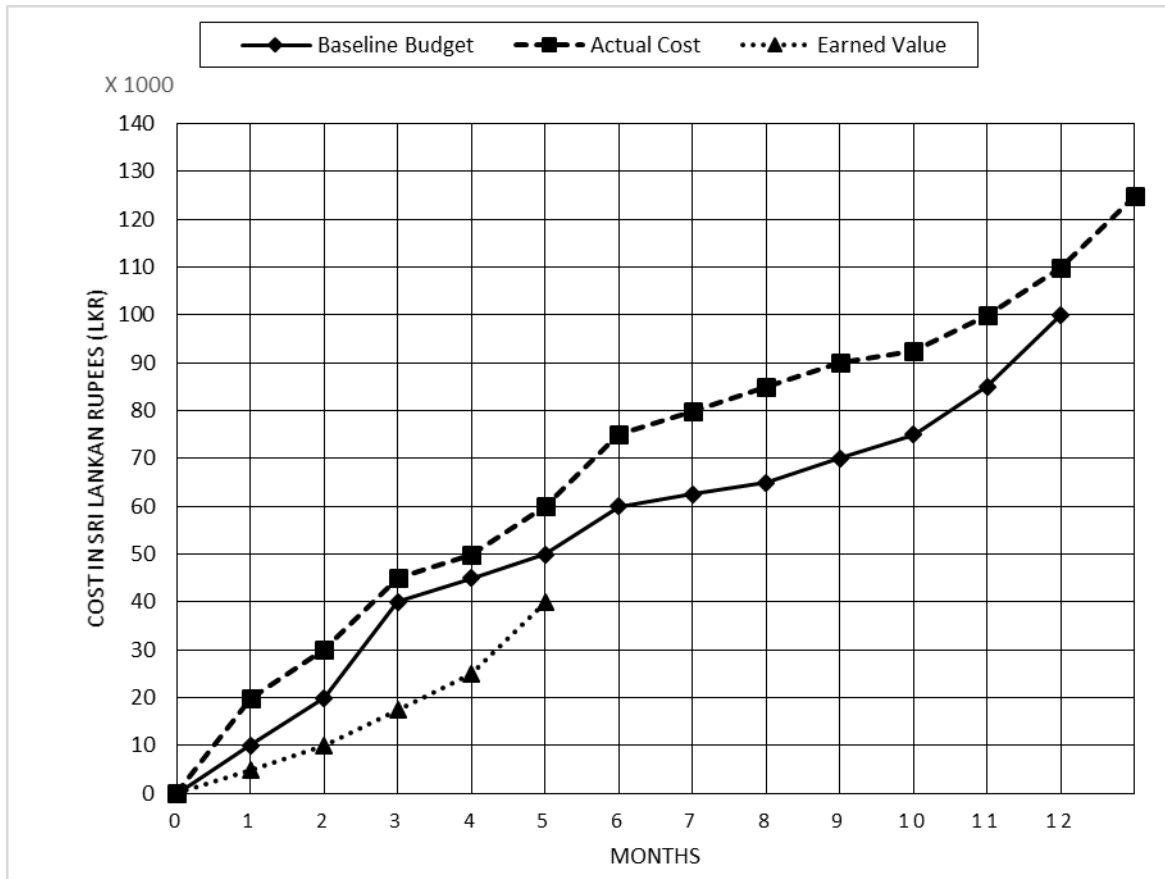
***18<sup>th</sup> November, 2017***

***(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 **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 (*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.**

For questions 1 – 10, consider the following earned value tracking chart of a software project. The x-axis represents the months and the y-axis represents cost of the project in Sri Lankan Rupees (LKR) in thousands.



1) What is the total estimated budget for the project in LKR?

- |             |             |                    |
|-------------|-------------|--------------------|
| (a) 40,000  | (b) 50,000  | (c) <b>100,000</b> |
| (d) 110,000 | (e) 125,000 |                    |

2) At the end of month 5, what is the time variance of the project?

- |                |                       |               |
|----------------|-----------------------|---------------|
| (a) 0 months   | (b) + 1 month         | (c) - 1 month |
| (d) + 2 months | (e) <b>- 2 months</b> |               |

3) At the end of month 5, what is the schedule variance of the project?

- |                         |                   |                |
|-------------------------|-------------------|----------------|
| (a) + 2 months          | (b) - 2 months    | (c) 10,000 LKR |
| (d) <b>- 10,000 LKR</b> | (e) - 20, 000 LKR |                |

4) What is the cost variance of the project at the end of month 5?

- |                  |                        |           |
|------------------|------------------------|-----------|
| (a) - 20,000 LKR | (b) - 10,000 LKR       | (c) 0 LKR |
| (d) 10, 000 LKR  | (e) <b>20, 000 LKR</b> |           |

- 5) What is the budget variance of the project at the end of month 5?
- |                  |                         |           |
|------------------|-------------------------|-----------|
| (a) – 20,000 LKR | (b) – <b>10,000 LKR</b> | (c) 0 LKR |
| (d) 10,000 LKR   | (e) 20, 000 LKR         |           |
- 6) What is the difference between the rates of performance of the project from month 2 to month 5?
- |                 |         |         |
|-----------------|---------|---------|
| (a) <b>30 %</b> | (b) 50% | (c) 60% |
| (d) 70%         | (e) 80% |         |
- 7) Based on the data available at month 5, how many more months would be required to complete the project in addition to the original estimate?
- |              |                     |              |
|--------------|---------------------|--------------|
| (a) 1 month  | (b) 2 months        | (c) 3 months |
| (d) 4 months | (e) <b>5 months</b> |              |
- 8) If it is known that this project completes in 10 months, what would be the overall schedule performance of the project?
- |         |         |                |
|---------|---------|----------------|
| (a) 0.8 | (b) 1.0 | (c) <b>1.2</b> |
| (d) 1.4 | (e) 2.0 |                |
- 9) What is the overall cost performance index of the project?
- |          |                |         |
|----------|----------------|---------|
| (a) 0.5  | (b) <b>0.8</b> | (c) 1.0 |
| (d) 1.25 | (e) 1.50       |         |
- 10) What is/are true about the above project?
- |  |
|--|
| <p>(a) <b>The project has recovered 25,000 LKR from the estimate at completion.</b></p> <p>(b) <b>When compared with month 2, project has recovered its schedule by month 5.</b></p> <p>(c) <b>When compared with month 2, project has increased its cost performance by one third by month 5.</b></p> <p>(d) According to the forecast at month 2, project overruns 24 months.</p> <p>(e) In general this project is an under budget and behind schedule project.</p> |
|--|

11) Which of the following statements is/are true regarding the methods of assigning an earned value?

- (a) **The 0/100 technique assigns a value of zero to a task until such time the task is completed. Then it is given a value of 100% of the budgeted value.**
- (b) **The 50/50 technique assigns 50% of the value as soon as the task is started and the remaining 50% is given at the completion of the task.**
- (c) The 75/25 technique assigns 25% of the value as soon as the task is started and then the remaining 75% is given in three 25% increments.
- (d) The milestone technique assigns the full value of the budget on achieving the milestone.
- (e) **It is regarded that the 50/50 technique provides the project manager with a false sense of security by over valuing the reporting of activity starts.**

12) Which of the following options represents tools and techniques used in quality control?

- (a) Cause and effect diagrams, control charts, exceptions matrix
- (b) Pareto analysis, histograms, box-whisker diagrams
- (c) **Run chart, Pareto analysis, flow charts**
- (d) Scatter plots, run charts, risk registers
- (e) **Control charts, histograms, flow charts**

13) Which of the following statements are accurate about histograms and Pareto charts?

- (a) Both histograms and Pareto charts represent continuous data.
- (b) **Pareto chart is a fancy name for a histogram ordered by the highest frequency with cumulative statistics.**
- (c) Pareto charts provide an overview of the quality of the system.
- (d) **Pareto charts enable a project manager to identify and prioritize problem areas.**
- (e) For any project, variables used in histograms and Pareto charts must be the same.

14) Which of the following is/are true about Ishikawa diagrams?

- (a) **They trace complaints regarding quality back to the responsible production operations.**
- (b) They represent a graphical display of data that illustrate the results of a process over time.
- (c) **These diagrams enable one to find the root cause of a problem by peeling away at layers of symptoms.**
- (d) Each depicts a relationship between two variables.
- (e) **They are also known as fishbone diagrams.**

15) Which of the following are a part of SMART criteria?

- |                     |                |                       |
|---------------------|----------------|-----------------------|
| (a) <b>Specific</b> | (b) Special    | (c) <b>Measurable</b> |
| (d) Maintenance     | (e) Actionable |                       |

16) Which of the following represent best practices when using project milestones?

- (a) **Carefully monitor the critical path.**
- (b) **Each milestone must be either complete or incomplete.**
- (c) All-encompassing milestones are not a requirement when designing milestones.
- (d) **Milestones must be kept small and frequent.**
- (e) **Milestones must be defined early in the project and should be included in a Gantt chart to provide a visual guide.**

17) A white diamond symbol on a tracking Gantt chart represents a

- (a) baseline date.
- (b) critical path.
- (c) slack.
- (d) scheduled task.
- (e) **slipped milestone.**

18) Which of the following are accurate about free slack?

- (a) It represents the earliest possible date that an activity can start.
- (b) It is the amount of time an activity can be delayed from its earliest start without delaying the planned project finish date.
- (c) **It means the same thing as free float.**
- (d) It represents the latest possible date an activity can start without affecting the finish date.
- (e) **It is the amount of time that an activity can be delayed without delaying the earliest start date of any immediately following activities.**

19) Which techniques are used to shorten a project schedule using the critical path?

- (a) Theory of Constraints
- (b) **Crashing**
- (c) Pareto charts
- (d) **Fast tracking**
- (e) Activity on arrow diagrams

20) Parkinson's Law states

- (a) that if something can go wrong it will.
- (b) that if additional time is added developers will get complacent.
- (c) **that work expands to fill the time allowed.**
- (d) that preserving the critical chain in delays will enable timely delivery.
- (e) that more resources will not mean a higher throughput.

21) Which of the following is true regarding task dependencies between tasks A (first) and B (second)?

- (a) **Finish-to-start dependency means that B cannot start until A finishes.**
- (b) Start-to-start dependency means that B and A start at the same time.
- (c) **Start-to-start dependency means B cannot start until A starts.**
- (d) Start-to-finish dependency means B cannot finish until A finishes.
- (e) **Start-to-finish dependency means B cannot finish until A starts.**

- 22) What are the factors that are included in the three-point estimate?
- |                                 |                                 |                     |
|---------------------------------|---------------------------------|---------------------|
| (a) Baseline estimate           | <b>(b) Optimistic estimate</b>  | (c) Earned estimate |
| <b>(d) Most likely estimate</b> | <b>(e) Pessimistic estimate</b> |                     |
- 23) Which of the following are a part of the five phases of the six sigma principles for quality control?
- |                    |                    |                    |
|--------------------|--------------------|--------------------|
| (a) Maintenance    | <b>(b) Measure</b> | <b>(c) Analyze</b> |
| <b>(d) Control</b> | <b>(e) Improve</b> |                    |
- 24) Which of the following represent points for *management* as mentioned by Deming?
- |  |
|--|
| (a) adopt a well versed philosophy                     |
| <b>(b) institute training on the job</b>               |
| <b>(c) drive out fear</b>                              |
| <b>(d) breakdown barriers between staff areas</b>      |
| (e) consistency is not very important in the processes |
- 25) Many organizations are turning to outsourcing to
- |  |
|--|
| <b>(a) allow the client organizations to focus on their core businesses.</b> |
| <b>(b) facilitate more access to skills and technologies.</b>                |
| <b>(c) reduce both fixed and recurrent costs.</b>                            |
| <b>(d) increase accountability.</b>  |
| <b>(e) provide flexibility.</b>  |
- 26) Which of the following statements are accurate about cost-reimbursable contracts?
- |   |
|---|
| <b>(a) In a cost plus incentive fee contract, the buyer pays the supplier for allowable performance costs along with a predetermined fee and an incentive bonus.</b>            |
| (b) In a cost plus fixed fee contract, the buyer pays the supplier for allowable performance costs only.  |
| (c) In a cost plus award fee contract, the buyer pays the supplier for allowable performance costs only.  |
| <b>(d) In a cost plus percentage of costs contract, the buyer pays the supplier for allowable performance costs along with a predetermined percentage based on total costs.</b> |
| (e) In a time and material contract, any combination of cost-reimbursable contract will apply.  |
- 27) What are the main processes in project procurement management?
- |                                 |                                   |                                      |
|---------------------------------|-----------------------------------|--------------------------------------|
| <b>(a) planning procurement</b> | <b>(b) conducting procurement</b> | <b>(c) administering procurement</b> |
| (d) testing procurement         | <b>(e) closing procurement</b>    |                                      |

- 28) What are potential risks associated with in knowledge areas of *integration*, *scope* and *time* respectively?
- (a) inadequate planning, incomplete definition, inadequate productivity
  - (b) substandard workmanship, estimating errors, absence of leadership
  - (c) poor resource allocation, poor definition of work packages, early release of competitive products**
  - (d) poor allocation management of float, poor project organization, lack of post-project review
  - (e) poor integration management, poor definition of scope, inadequate contingency
- 29) Which of the following represent(s) basic risk response strategies for negative risks?
- (a) risk exploitation
  - (b) risk sharing
  - (c) risk seeking
  - (d) risk transference**
  - (e) risk acceptance**
- 30) Which of the following represent(s) basic risk response strategies for positive risks?
- (a) risk enhancement**
  - (b) risk neutral
  - (c) risk aversion
  - (d) risk avoidance
  - (e) risk exploitation**
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