

## ***Revision in Cost Estimation for the Mid-Term***

### ***(Q1) Choose True or False and label them in your sheet.***

- (1)** During estimation we assume resources will be productive for more than 80 percent of their time. ( **FALSE** )
- (2)** As the number of rounds in the Wideband Delphi Estimation decreases the range of estimation will be narrower, and Results are converged to an acceptable range. ( **TRUE** )
- (3)** The moderator generates a detailed (Wideband Delphi Estimation Sheet), estimates each task in the WBS, and documents the assumptions made. ( **FALSE** )
- (4)** Estimation team members prepare a structured document containing problem specification, high level task list, assumptions, and the units of estimation. ( **TRUE** )
- (5)** The value adjustment factor VAF exerts an influence of  $\pm 65\%$  on the final adjusted function points FP count. ( **FALSE** )
- (6)** Function point is independent of both technology and programming languages. ( **TRUE** )
- (7)** Windows, interfaces, and dialog boxes are GUI that can be used in counting function points. ( **TRUE** )
- (8)** Requirements are the only thing needed for function point count. ( **FALSE** )
- (9)** Milestones are points in the schedule to assess progress. ( **TRUE** )
- (10)** Deliverables are work products delivered to the customer. ( **TRUE** )
- (11)** One of the scheduling problems is to estimate time and resources for each task in the project. ( **TRUE** )
- (12)** One of the scheduling activities is to minimize dependencies between tasks in the project. ( **TRUE** )
- (13)** The algorithmic cost modelling is based on experience of past project and application domain. ( **TRUE** )
- (14)** The size of the project is affected by the reused components and the programming language. ( **TRUE** )
- (15)** Doubling the number of staff means that the duration of the project will be half the initial period. ( **FALSE** )
- (16)** If 4 people can complete a project in 13 month, then 5 people can complete it in 11 month. ( **FALSE** )
- (17)** Three-point Estimate (E) is based on the weighted average and follows triangular distribution. ( **TRUE** )
- (18)** PERT Estimate is based on the weighted average and follows beta distribution. ( **TRUE** )
- (19)** Analogous estimation is a better way of estimation in the initial stages of the project, even if the project is new, and no past project is similar. ( **FALSE** )

- (20) The transaction functions EI (external inputs), EO (external outputs), EQ (external inquiries) are measured by counting FTRs (file type referenced) and DETs (data element type) that they contain. ( **TRUE** )
- (21) The data functions ILF (internal logic files) and EIF (external interface files) are measured by counting DETs (data element type) and RETs (record element type) that they contain. ( **TRUE** )
- (22) The processing logic of external inquiries (EQ) present information to the user through the retrieval of data or control information and must contain mathematical formulas for calculations. ( **FALSE** )
- (23) The processing logic of external outputs (EO) present information to the user through the retrieval of data or control information and must contain at least one mathematical formula for calculations. ( **TRUE** )

**(Q2) Choose the right answers and label them in your sheet.**

- (24) Estimation determines how much of the following it will take to build a specific system or product:
- (a) *Experience*    (b) *Knowledge*    (c) **Resources**    (d) *Identified Risks*
- (25) The four basic steps in Software Project Estimation are:
- (a) *Size, effort, schedule, and cost*
  - (b) *Input data, calculations, historical data, and good plan.*
  - (c) *Experience, Assumptions, Identified Risks, and Available Documents*
  - (d) *Money, time, resources, and effort*
- (26) Important factors that affect the accuracy of estimates are:
- (a) *Accuracy of input data, accuracy of calculation, how historical or industry data matches the project, and carefully planned project.*
  - (b) *Size, effort, schedule, and cost*
  - (c) *Experience, Assumptions, Identified Risks, and Available Documents*
  - (d) *Money, time, resources, and effort*
- (27) In a use case, transactions are classified as simple if their number is:
- (a)  $\leq 3$     (b)  $\geq 3$     (c)  $\leq 7$     (d)  $\geq 7$
- (28) In a use case, transactions are classified as complex if their number is:
- (a)  $\leq 3$     (b)  $\geq 3$     (c)  $\leq 7$     (d)  $\geq 7$
- (29) In a use case model, actors are classified as complex if:
- (a) *There is no interaction with the system*
  - (b) ***user interacting through GUI***
  - (c) *user interacting through API*
  - (d) *interacting through a protocol*
- (30) In a use case model, actors are classified as average if:
- (a) *There is no interaction with the system*
  - (b) *User interacting through GUI*
  - (c) *User interacting through API*

**(d) User interacting through a protocol**

**(31)** One of the following affects software pricing:

- (a) Development plan**
- (b) Pricing to win**
- (c) Increased pricing**
- (d) Requirements volatility**

**(32)** In the Wideband Delphi Estimation, the process is stopped after:

- (a) Certain number of rounds and Achievement of consensus**
- (b) Achievement of consensus and Stability of results**
- (c) Stability of results, Achievement of consensus, and Certain number of rounds**
- (d) Certain number of rounds, achievement of consensus, or stability of results**

**(33)** The Unadjusted Use-Case Points (UUCP) must be adjusted for :

- (a) Estimation sheet, Technical and Environmental Complexity**
- (b) Environmental Complexity and Estimation sheet**
- (c) Technical Complexity, and Environmental Complexity**
- (d) Technical Complexity and Estimation sheet**

**(34)** One of the following is a pricing strategy:

- (a) Contractual terms**
- (b) Market opportunity**
- (c) Underpricing**
- (d) Proposal planning**

**(35)** One of the planning stages:

- (a) Requirement volatility**
- (b) Contingency planning**
- (c) Market opportunity**
- (d) Proposal planning**

**(36)** Which of the of the following sub-models in the COCOMO method is based on the number of application points:

- (a) Early design model**
- (b) Reuse model**
- (c) Post architectural model**
- (d) Application decomposition model**

**(37)** Which of the of the following sub-models in the COCOMO method is based on the number of function points:

- (a) Early design model**
- (b) Reuse model**
- (c) Post architectural model**
- (d) Application decomposition model**

**(38)** Which of the of the following sub-models in the COCOMO method is based on the number of lines reused or generated:

- (a) Early design model**
- (b) Reuse model**
- (c) Post architectural model**
- (d) Application decomposition model**

**(39)** Which of the of the following sub-models in the COCOMO method is based on the number of lines of source code:

- (a) Early design model**
- (b) Reuse model**
- (c) Post architectural model**
- (d) Application decomposition model**

(40) Screens, reports, graphs, or control signals that the program generates for use by an end user or other program are considered ...

- a) External Inputs
- b) External Outputs**
- c) External queries