

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) ≤ 3 (b) ≥ 3 (c) ≤ 7 (d) ≥ 7

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- (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