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 less than 80 percent of their time.   *(   )*

(2) The moderator generates a detailed (Wideband Delphi Estimation Sheet), estimates each task in the WBS, and documents the assumptions made.   *(   )*

(3) Requirements are the only thing needed for function point count.   *(   )*

(4) Deliverables are work products delivered to the customer.   *(   )*

(5) One of the scheduling activities is to minimize dependencies between tasks in the project.   *(   )*

(6) The algorithmic cost modelling is based on experience of past project and application domain.   *(   )*

(7) If 4 people can complete a project in 13 months, then 5 people can complete it in 11 months.   *(   )*

(8) PERT Estimate is based on the weighted average and follows beta distribution. *(   )*

(9) 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.   *(   )*

(10) 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.   *(   )*

(11) 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.   *(   )*

(12) Three-point Estimate (E) is based on the arithmetic average and follows triangular distribution.   *(   )*

(13) One of the scheduling activities is to estimate time and resources for each task in the project.   *(   )*

(14) Doubling number of staff does not mean that duration of the project will be half the initial period. *(   )*

(15) Milestones are work products delivered to the customer. *(   )*

(16) The size of the project is not affected by the reused components and the programming language. *(   )*

(17) Analogous estimation is a better way of estimation in the initial stages of the project, if the project is not new, and there are similar past projects.

(18) The processing logic of external inquiries (EQ) present information to user through the retrieval of data or control information and must not contain mathematical formulas for calculations.

(19) During estimation we assume resources will be productive for 80 percent of their time.

(20) 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.

(21) The moderator in the Wideband Delphi Estimation prepares a structured document containing problem specification, high level task list, assumptions, and the units of estimation.

(22) One of the scheduling activities is to minimize dependencies between tasks in the project.

(23) Adding people to a project decreases the productivity of existing team members.

(24) If the feature set of a project is flexible and can be cut, the schedule cannot be shortened up to certain limit, subject to your willingness to cut features.

(25) Transaction functions are measured by data element types and record element types.

(26) Internal logic files, and external interface files are types of data functions.

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

(27) 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

(28) 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

(29) In a use case, transactions are classified as simple if their number is:
   (a) ≤ 3
   (b) ≥ 3
   (c) ≤ 7
   (d) ≥ 7

 (30) In a use case, transactions are classified as complex if their number is:
   (a) (a≤ 3
   (b) ≥ 3
   (c) ≤ 7
   (d) ≥ 7

(31) 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

(32) 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

(33) One of the planning stages:

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

(34) 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

(35) 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

(36) 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

(37) 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

(38) One of the following is a reason for underpricing:
  - *(a)* Contractual terms
  - *(b)* Market opportunity
  - *(c)* The feature set is not flexible
  - *(d)* Proposal planning

(39) 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

(40) Screens, reports, graphs, or control signals that inters the program from an end user or other program are considered …
  - *(a)* External Inputs
  - *(b)* External Outputs
  - *(c)* External queries
  - *(d)* External interface files

(41) Types of Transaction functions are:
  - *(a)* External inputs, external outputs, and external queries.
  - *(b)* Internal logic files, external interface files.
  - *(c)* Data element types, and file type referenced.
  - *(d)* Data element types and record element types.

(42) In a use case model, actors are classified as simple 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

(43) 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

(44) One of the following strategies should be done when customer wants fixed price:
  - *(a)* Development plan
  - *(b)* Pricing to win
  - *(c)* Increased pricing
  - *(d)* Requirements volatility

(45) Types of data functions are:
  - *(a)* External inputs and externa outputs
  - *(b)* Internal logic files and external interface files
  - *(c)* Data elements and record elements
  - *(d)* External queries and file type reference

(46) Transaction functions are measured by:
    (a) External inputs, external outputs, and external queries
    (b) Internal logic file and external interface file
    (c) Data element types and record element types
    (d) Data element types and file type referenced