

MCQ Section

Subject: Advances in Software Engineering
Semester: I
Year : ME-I

Course Code: MEITC103
Branch: Information Technology
Marks :40

- 1] All questions are Compulsory
- 2] Assume suitable data wherever required.

Q1. Attempt all questions. [20*2=40M]

- 1) Which of these does a good design follow?
 - a) A good design should specify a program that can be built, tested and deployed on time
 - b) A good design should be concluded in its budget
 - c) A good design can vary risk
 - d) A good design should specify a program that can be built, tested and deployed on time and within its budget

- 2) Which of these does not represent object oriented design?
 - a) It follows regular procedural decomposition in favour of class and object decomposition
 - b) Programs are thought of collection of objects
 - c) Central model represents class diagrams that show the classes comprising a program and their relationships to one another
 - d) Object-oriented methods incorporates Structural methods

- 3) Which of the architectural style is further subdivided into Batch sequential and Pipes & filters?
 - a) Data Flow Architecture
 - b) Call and Return Architecture
 - c) Data Centered Architectures
 - d) Shared Architecture

- 4) What is incorrect among the following?
 - a) Make use cases that uniform in size and complexity
 - b) Organize use cases by actor, problem domain categories or solution categories
 - c) Use cases can last for more than one session
 - d) Achieve a stakeholder goal in a use case

- 5) Which of the following is not a user interface design process?
 - a) User, task, and environment analysis and modelling
 - b) Interface design
 - c) Knowledgeable, frequent users
 - d) Interface validation

- 6) Which of these are followed in case of software design process?
 - a) Analysis occurs at start of product design with a product idea
 - b) Analysis occurs at the end of engineering design with the SRS

- c) Product design resolution produces the design document
 - d) Engineering design resolution produces the SRS
- 7) The PERT in project management means program evaluation and _____ technique.
- a) resource
 - b) reconciliation
 - c) reconsideration
 - d) review
- 8) COTS product reuse means
- a) Class and function libraries that implement commonly used abstractions are available for reuse
 - b) Shared components are woven into an application at different places when the program is compiled
 - c) Large-scale systems that encapsulate generic business functionality and rules are configured for an organization
 - d) Systems are developed by configuring and integrating existing application systems
- 9) Which of the following is not an advantages of software reuse?
- a) lower costs
 - b) faster software development
 - c) high effectiveness
 - d) lower risks
- 10) Which of the following describes a message-passing taxonomy for a component-based architecture that provides services to clients upon demand?
- a) SOA
 - b) EBS
 - c) GEC
 - d) QOS
- 11) Agile Software Development is based on
- a) Incremental Development
 - b) Iterative Development
 - c) Linear Development
 - d) Both Incremental and Iterative Development
- 12) Which one of the following is not a fundamental activity for software processes in software engineering ?
- a) Software Verification
 - b) Software Validation
 - c) Software design and implementation
 - d) Software evolution
- 13) Arrange the steps in order to represent the conducting of Wideband Delphi Technique.
- i. Conduct a group discussion
 - ii. Conduct another group discussion
 - iii. Present experts with a problem
 - iv. Collect expert opinion anonymously
 - v. Iterate until consensus is reached

vi. Feedback a summary of result to each expert

- a) i, iii, ii, iv, v, vi
- b) iii, i, ii, iv, v, vi
- c) i, ii, iii, iv, vi, v
- d) iii, i, iv, vi, ii, v

14) How many steps are involved in Feature Oriented Domain Analysis (FODA) ?

- a) Two
- b) Three
- c) Four
- d) Five

15) Which model in system modelling depicts the static nature of the system ?

- a) Behavioral Model
- b) Context Model
- c) Data Model
- d) Structural Model

16) Which of the following diagram is not supported by UML considering Data-driven modeling ?

- a) Activity
- b) Data Flow Diagram (DFD)
- c) State Chart
- d) Component

17) _____ classes are used to create the interface that the user sees and interacts with as the software is used.

- a) Controller
- b) Entity
- c) Boundary
- d) Business

18) How is generalization implemented in Object Oriented programming languages?

- a) Inheritance
- b) Polymorphism
- c) Encapsulation
- d) Abstract Classes

19) Which of the following early OOD methods incorporates both a “micro development process” and a “macro development process.” ?

- a) Booch method
- b) Rumbaugh method
- c) Wirfs-Brock method
- d) Coad and Yourdon method

20) Which of the following is not included in Architectural design decisions?

- a) type of application
- b) distribution of the system
- c) architectural styles
- d) testing the system

Descriptive Section

Attempt all questions. [40M]

Q2. Attempt the following (Any 4 each for 5 Marks)

- A) Explain Spiral Model.
- B) Describe with example Class-Based Modeling.
- C) Explain Aspect Oriented Engineering.
- D) What is Metric? Explain Process and Project metrics.
- E) Explain Service-oriented architecture

Q3. Attempt the following (Any 2 each for 10 Marks)

- A) Explain software design concept in brief.
- B) Explain in details Extreme Programming (XP) and differentiate between Incremental Process Models and Evolutionary Process Models.
- C) Explain in detail RMMM.