



**SIDDHARTH GROUP OF INSTITUTIONS :: PUTTUR**  
Siddharth Nagar, Narayanavanam Road – 517583

**QUESTION BANK (DESCRIPTIVE)**

**Subject with Code : SE (13A05504)**

**Course & Branch : B.Tech-CSE**

**Year & Sem : III B.Tech & I-Sem**

**Regulation : R13**

**UNIT – I**

**Software and Software Engineering & Process Models**

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|--|-----|
| 1. a) What is Software Engineering? Explain the Nature of Software?      | 6M  |
| b) List the types of software myths?                                     | 4M  |
| 2. a) List all the umbrella activities in process framework?             | 6M  |
| b) Explain is legacy software?   | 4M  |
| 3. Explain about various types of Prescriptive Process Models?           | 10M |
| 4. Explain about various types of Specialized Process Models?            | 10M |
| 5. a) What is unified process? List the phases in unified process model? | 5M  |
| b) List the types of patterns?   | 5M  |
| 6. a) Explain software component? Explain its uses.                      | 5M  |
| b) Explain process assessment?   | 5M  |
| 7. a) Compare between perspective and iterative process models?          | 6M  |
| b) Explain about Software Process?                                       | 4M  |
| 8. Explain in detail about Personal and Team Process Models?             | 10M |
| 9. a) Explain about Process Terminology?                                 | 5M  |
| b) Explain about Product and Process?                                    | 5M  |
| 10. a) Demonstrate all the applications of software?                     | 2M  |
| b) Explain about process pattern?  | 2M  |
| c) Difference between Process Assessment and Improvement?                | 2M  |
| d) Explain Boehm model?  | 2M  |
| e) List the types of software models?                                    | 2M  |

**UNIT – 2**

**Understanding Requirements & Requirements Modeling.**

- |  |     |
|--|-----|
| 1. What is Requirements Engineering? Explain about Requirements Engineering tasks? | 10M |
| 2. a) Explain about the concept of Eliciting Requirements?                         | 6M  |
| b) Discuss data flow model?  | 4M  |
| 3. Explain about Data modeling concepts?   | 10M |

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|--|-----|
| 4. Explain about Scenario based modeling?                                    | 10M |
| 5. Explain about Class based modeling?                                       | 10M |
| 6. Explain about Scenario-based elements in Analysis model?                  | 10M |
| 7. a) Explain about Class based elements in Analysis model?                  | 5M  |
| b) Explain SRS document and explain along with its contents?                 | 5M  |
| 8. a) Explain the concept of Requirement Analysis?                           | 6M  |
| b) Explain data dictionary?  | 4M  |
| 9. Explain about developing Use Cases & how to build the Requirements Model? | 10M |
| 10. a) What is use case? How to develop use cases?                           | 2M  |
| b) Explain about Behaviour elements in Analysis model?                       | 2M  |
| c) Explain about Negotiating requirements?                                   | 2M  |
| d) What are Analysis patterns?   | 2M  |
| e) Explain about validating requirements?                                    | 2M  |

### UNIT – 3

#### Design concept & Architectural design & Component level design

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|--|-----|
| 1. What is architectural style? Describe about different architectural styles.       | 10M |
| 2. Write a short note on design process?   | 10M |
| 3. Explain the design concepts in software engineering?                              | 10M |
| 4. Discuss interface design steps in a brief manner?                                 | 10M |
| 5. Explain software architecture in a detail?  | 10M |
| 6. Differentiate architecture design and design phases of SDLC?                      | 10M |
| 7. What are the steps for conducting component level design?                         | 10M |
| 8. Explain how to design class based components? Explain its basic design principle? | 10M |
| 9. What is a component? Explain in detail?   | 10M |
| 10. Explain the term   |     |
| a) cohesion  | 2M  |
| b) coupling  | 2M  |
| c) A brief taxonomy of architectural style   | 2M  |
| d) Vertical Partitioning   | 2M  |
| e) Architectural design  | 2M  |

**UNIT – 4****User interface design and coding & testing**

1. Discuss about Golden Rules of UI? How these rules affect on UI analysis & design? 10M
2. Explain about user interface analysis and design process? 10M
3. Explain interface design principles and guidelines? 10M
4. a) Write a short note on interface design Evaluation? 5M  
b) What are the four different models in user interface analysis and design? 5M
5. a) Explain about Black box testing? 5M  
b) Explain about the concept of code review technique? 5M
6. a) Explain about White box testing? 5M  
b) Write a short notes on software documentation? 5M
7. Write a strategic approach to software testing? 10M
8. What is system testing? Explain any two system testing in detail. 10M
9. a) Explain the concept of Debugging? 5M  
b) Explain about the test strategies for conventional software 5M
10. Explain the following
  - a) Smoke testing 2M
  - b) Regression testing 2M
  - c) Alpha & Beta testing 2M
  - d) Stress testing 2M
  - e) Testing in small versus Testing in large 2M

**UNIT – 5****Software project management & Software maintenance**

1. What are all the responsibilities of project manager? 10M
2. Write a short note on
  - a) Software Reverse Engineering 5M
  - b) Software configuration management 5M
3. Explain about the project estimation techniques. 10M
4. Explain about COCOMO-A Heuristic Estimation Technique 10M
5. Write about Empirical Estimation Technique in detail? 10M
6. Explain about organization and team structures? 10M
7. What are the characteristics of software maintenance? 10M
8. Explain about staffing level estimation 10M
9. Explain about measuring quality of software and explain defect removal efficiency? 10M
10. Write a short note on
  - a) Various estimation technique. 2M
  - b) Software cost. 2M
  - c) Software project scheduling. 2M
  - d) Types of metrics. 2M
  - e) Risk management. 2M

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**UNIT – I**

**Software and Software Engineering & Process Models**

- 1) From the following which quality deals with maintaining the quality of the software product?
 

A) Quality assurance	B) Quality control	
C) Quality efficiency	D) None of the above	[     ]
  
- 2) Software project manager is engaged with software management activities. He is responsible for \_\_\_\_\_
 

A) . Project planning.	B) Monitoring the progress	
C) Communication among stakeholders	D) All mentioned above	[     ]
  
- 3) Which tool consist of programming environments like IDE, in-built modules library and simulation tools?
 

A) Web development tools	B) Prototyping tools	
C) Programming tools	D) Design tools	[     ]
  
- 4) The spiral model was originally proposed by
 

A) IBM	B) Barry Boehm	
C) Pressman	D) Royce	[     ]
  
- 5) Which is one of the most important stakeholder from the following ?
 

A) Entry level personnel	B) Middle level stakeholder	
C) Managers	D) Users of the software	[     ]
  
- 6) Select the developer specific requirement?
 

A) Portability	B) Maintainability	
C) Availability	D) Both a and b	[     ]
  
- 7) Efficiency in a software product does not include \_\_\_\_\_
 

A) responsiveness	B) licensing	
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- C) memory utilization                      D) processing time                      [     ]
- 8) The reason for software bugs and failures is due to  
A) Software companies                      B) Software Developers
- C) Both a and b                      D) none                      [     ]
- 9) Which one of the following models is not suitable for accommodating any change?  
A) Build & Fix Model                      B) Prototyping Model
- C) RAD Model                      D) Waterfall Model                      [     ]
- 10) Which one of the following is not a phase of Prototyping Model?  
A) Quick Design                      B) Coding
- C) Prototype Refinement                      D) Engineer Product                      [     ]
- 11) SDLC stands for  
A) Software Development Life Cycle                      B) System Development Life cycle
- C) Software Design Life Cycle                      D) System Design Life Cycle                      [     ]
- 12) Which model can be selected if user is involved in all the phases of SDLC?  
A) Waterfall Model                      B) Prototyping Model
- C) RAD Model                      D) both b & c                      [     ]
- 13) Which of these software engineering activities are not a part of software processes?  
A) Software dependence.                      B) Software development.
- C) Software validation.                      D) Software specification.                      [     ]
- 14) What are attributes of good software?  
A) Software maintainability.                      B) Software functionality.
- C) Software development.                      D) a and b.                      E) a, b and c.                      [     ]
- 15) Which of these is incorrect?  
A) Software engineering belongs to Computer science.  
B) Software engineering is a part of more general form of System Engineering.                      [     ]  
C) Computer science belongs to Software engineering.  
D) Software engineering is concerned with the practicalities of developing and delivering useful software.
- 16) Which one of the following is not a software process quality?  
A) Productivity                      B) Portability
- C) Timeliness                      D) Visibility                      [     ]
- 17) \_\_\_\_\_ & \_\_\_\_\_ are two kinds of software products.  
A) CAD, CAM                      B) Firmware, Embedded
- C) Generic, Customized                      D) none                      [     ]
- 18) Which of the following activities of a Generic Process framework provides a feedback

report?

- A) Communication                      B) Planning  
 C) Modeling & Construction              D) Deployment                      [     ]

19) Which one of the following is not an Umbrella Activity that complements the five process framework activities and help team manage and control progress, quality, change, and risk.

- A) Re-usability management              B) Risk management  
 C) Measurement                      D) Software quality assurance                      [     ]

20) 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                      [     ]

21) The inception phase of the UP encompasses both customer \_\_\_\_\_ and \_\_\_\_\_ activities.

- A) Communication                      B) planning  
 C) modeling                      D) both a & b                      [     ]

22) The elaboration phase encompasses the communication and modeling activities of the generic process model

- A) Communication                      B) planning  
 C) Communication & modeling              D) none                      [     ]

23) The \_\_\_\_\_ phase of the UP is identical to the construction activity defined for the generic software process.

- A) Construction                      B) Communication  
 C) Planning                      D) modeling                      [     ]

24) The \_\_\_\_\_ phase of the UP coincides with the deployment activity of the generic process.

- A) Construction                      B) production  
 C) modeling                      D) planning                      [     ]

25) The Personal Soft-ware Process (PSP) emphasizes personal measurement of both the work product that is produced and the resultant quality of the work product.

- A) Personal Soft-ware Process (PSP)              B) Team Soft-ware Process (TSP)  
 C) Software process                      D) none                      [     ]

26) Planning and High-level design defines the framework activities in

- A) TSP                      B) PSP  
 C) both a & b                      D) none                      [     ]

27) Project launch and high-level design defines the framework activities in

- A) TSP                      B) PSP  
 C) both a & b                      D) none                      [     ]

28) \_\_\_\_\_ is a rigorous approach to software engineering that provides distinct and quantifiable benefits in productivity and quality.

- A) TSP                                      B) PSP  
C) both a & b                                D) none                                      [     ]

29) \_\_\_\_\_ tools allow a software organization to build an automated model of the process framework.

- A) TSP                                      B) PSP  
C) both a & b                                D) Process technology                                      [     ]

30) The incremental model combines elements of linear and parallel process flows

- A) Waterfall                                B) Incremental  
C) spiral                                      D) none                                      [     ]

31) Stage pattern - defines a problem associated with a framework activity for the process.

- A) Task                                      B) Phase  
C) Stage                                      D) none                                      [     ]

32) \_\_\_\_\_ is a collection of activities, actions, and tasks that are performed when some work product is to be created.

- A) Software                                B) Process  
C) Task                                      D) none                                      [     ]

33) \_\_\_\_\_ encompasses a set of tasks that produce a major work product (e.g., an architectural design model).

- A) Action                                    B) software  
C) task                                      D) none                                      [     ]

34) \_\_\_\_\_ activity combines code generation (either manual or automated) and the testing that is required to uncover errors in the code.

- A) Action                                    B) communication  
C) Construction                            D) none                                      [     ]

35) \_\_\_\_\_ allows the software team to assess progress against the project plan and take any necessary action to maintain the schedule.

- A) Communication                        B) Software project tracking and control  
C) both a & b                                D) none                                      [     ]

36) \_\_\_\_\_ assesses risks that may affect the outcome of the project or the quality of the product.

- A) Risk management                      B) Software project tracking and control  
C) both a & b                                D) none                                      [     ]

37) \_\_\_\_\_ defines and conducts the activities required to ensure software quality.

- A) Risk management                      B) Software project tracking and control  
C) Software quality assurance            D) none                                      [     ]

38) \_\_\_\_\_ assesses software engineering work products in an effort to uncover and remove errors before they are propagated to the next activity.

- A) Technical reviews                      B) Software project tracking and control  
C) Software quality assurance            D) none                                      [     ]

39) \_\_\_\_\_ defines criteria for work product reuse (including software components) and establishes mechanisms to achieve reusable components.

- A) Technical reviews                      B) Reusability management  
C) Software quality assurance            D) none                                      [     ]

40) \_\_\_\_\_ manages the effects of change throughout the software process.

- A) Software configuration management      B) Reusability management  
 C) Software quality                              D) none    [      ]

## UNIT – II

### Understanding Requirements & Requirements Modeling.

1. Create and maintain a system requirements document is called \_\_\_\_\_  
 A) Design Engineering Process      B) Requirements Engineering Process  
 C) Analysis Engineering Process      D) Requirements Analysis Process                      [      ]
2. \_\_\_\_\_ defined as anyone who benefits in a direct or indirect way from the system which being developed.  
 A) Managers                                      B) Developers  
 C) Testers                                         D) Stakeholders                                      [      ]
3. Suppose if a set of core product is well understood, but the details of product extensions have not yet to be defined \_\_\_\_\_ process model is suited .  
 A) Specialized                                  B) Evolutionary  
 C) Unified                                         D) Team    [      ]
4. \_\_\_\_\_ is a iterative process through which requirements are translated to blueprint  
 A) Software analysis                         B) requirements  
 C) Software design                            D) None    [      ]
5. Elicitation and analysis phases of requirements engineering process are to \_\_\_\_\_  
 A) Modify the requirements                B) Priorities the requirements  
 C) Discovering the requirements          D) None    [      ]
6. Which of the following are the problems of eliciting requirements?  
 A) Scope                                         B) understanding  
 C) volatility                                     D) All the above                                      [      ]
7. Questions asked at the inception of the project should be \_\_\_\_\_  
 A) Case sensitive                              B) Context based  
 C) Context free                                 D) Regular grammar                                [      ]
8. The system is describe from the user's point of view using a \_\_\_\_\_ approach  
 A) Scenario-based                              B) Class-based  
 C) Behavioral                                    D) Flow-oriented based                            [      ]
9. \_\_\_\_\_ are validation techniques.  
 A) Prototyping                                 B) Test case generation  
 C) Requirement reviews                    D) All the above                                      [      ]



10. \_\_\_\_\_ modeling act as bridge between system description & design modeling.  
A) Analysis                      B) Scenario-based  
C) UML                              D) None                              [     ]
11. QFD stands for  
A) quality function design              B) quality function development  
C) quality function deployment              D) none of the mentioned              [     ]
12. Which is one of the most important stakeholder from the following?  
A) Entry level personnel              B) Middle level stakeholder  
C) Managers                              D) Users of the software              [     ]
13. Which of the following elicitation techniques is a view-point based method?  
A) FODA                              B) QFD  
C) CORE                              D) IBIS                              [     ]
14. \_\_\_\_\_ and \_\_\_\_\_ are the two viewpoints discussed in Controlled Requirements Expression (CORE).  
A) Functional, Non-FUNCTIONAL              B) User, Developer  
C) Known, Unknown                      D) none                              [     ]
15. What is the major drawback of CORE?  
A) Requirements are comprehensive              B) NFRs are not given enough importance  
C) Role of analyst is passive              D) none                              [     ]
16. How many steps are involved in Feature Oriented Domain Analysis (FODA) ?  
A) Two                              B) Three  
C) Four                              D) Five                              [     ]
17. Which of the following Requirement Elicitation Techniques removes the poor understanding of application domain and lack of common terminology between the users and the analysts?  
A) FODA                              B) CORE  
C) IBIS                              D) Prototyping                              [     ]
18. Which one of the following is not an actor in JAD sessions?  
A) User                              B) Tester  
C) Scribe                              D) Sponsor                              [     ]
19. Which of the following is not a diagram studied in Requirement Analysis?  
A) Use Cases                              B) Entity Relationship Diagram  
C) State Transition Diagram              D) Activity Diagram                      [     ]
20. How many feasibility studies is conducted in Requirement Analysis?  
A) Two                              B) Three  
C) Four                              D) Five                              [     ]
21. How many phases are there in Requirement Analysis?  
A) Three                              B) Four  
C) Five                              D) Six                              [     ]
22. \_\_\_\_\_ and \_\_\_\_\_ are the two issues of Requirement Analysis.

- A) Performance, Design                      B) Stakeholder, Developer  
C) Functional, Non-Functional              D) none    [     ]
23. Coad and Yourdon suggested \_\_\_\_\_ selection characteristics that should be used as an analyst considers each potential object for inclusion in the requirement analysis model.  
A) Three                      B) Four  
C) Five                      D) Six    [     ]
24. How is throwaway prototype different from evolutionary prototype ?  
A) It involves successive steps.              B) It involves just one task.  
C) The prototype is built with the idea that it will eventually be converted into final system.  
D) It has a shorter development time.    [     ]
25. Keeping the requirements of QFD in mind which of the following is not an example of an Expected requirement ?  
A) Ease of software installation  
B) Overall operational correctness and reliability  
C) Specific system functions  
D) Quality graphical display    [     ]
26. Which of the following property does not correspond to a good Software Requirements Specification (SRS) ?  
A) Verifiable                      B) Ambiguous  
C) Complete                      D) Traceable    [     ]
27. Which of the following property of SRS is depicted by the statement “Conformity to a standard is maintained” ?  
A) Correct                      B) Complete  
C) Consistent                      D) Modifiable    [     ]
28. The SRS is said to be *consistent* if and only if  
A) its structure and style are such that any changes to the requirements can be made easily while retaining the style and structure.  
B) every requirement stated therein is one that the software shall meet  
C) every requirement stated therein is verifiable  
D) no subset of individual requirements described in it conflict with each other    [     ]
29. Which of the following statements about SRS is/are true ?  
i. SRS is written by customer  
ii. SRS is written by a developer  
iii. SRS serves as a contract between customer and developer  
A) Only i is true                      B) Both ii and iii are true  
C) All are true                      D) none    [     ]
30. The SRS document is also known as \_\_\_\_\_ specification.  
A) black-box                      B) white-box  
C) grey-box                      D) none    [     ]
31. Which of the following is included in SRS ?  
A) Cost                      B) Design Constraints  
C) Staffing                      D) Delivery Schedule    [     ]

32. Which of the following is not included in SRS ?  
 A) Performance                      B) Functionality  
 C) Design solutions                  D) External Interfaces                      [     ]
33. 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                      [     ]
34. \_\_\_\_\_ allows us to infer that different members of classes have some common characteristics.  
 A) Realization                                      B) Aggregation  
 C) Generalization                                  D) dependency                      [     ]
35. \_\_\_\_\_ & \_\_\_\_\_ diagrams of UML represent Interaction modeling.  
 A) Use Case, Sequence                              B) Class, Object  
 C) Activity, State Chart                              D) None                      [     ]
36. Processes for evolving a software product depend on:  
 A) Type of software to be maintained.                      B) Development processes used.  
 C) Skills and experience of the people involved.                      D) All the mentioned                      [     ]
37. What are the four dimensions of Dependability ?  
 A) Usability, Reliability, Security, Flexibility B) Availability, Reliability, Maintainability, Security  
 C) Availability, Reliability, Security, Safety D) Security, Safety, Testability, Usability [     ]
38. Which one of the following is a requirement that fits in a developer's module ?  
 A) Availability                  B) Testability  
 C) Usability                      D) Flexibility                      [     ]
39. \_\_\_\_\_ focuses on the definition of classes and the manner in which they collaborate with one another to effect customer requirements.  
 A) analysis modeling                  B) requirement modeling  
 C) both a & b                      D) none                      [     ]
40. In many instances, two analysis classes are related to one another in some fashion, much like two data objects may be related to one another. In UML these relationships are called \_\_\_\_\_  
 A) Dependencies                                      B) associations  
 C) both a & b                                      D) none                      [     ]

### UNIT-3

#### Design concept & Architectural design & Component level design

1. How many elements present in the analysis model                      [     ]  
 A) 4                                      B) 5  
 C) 6                                      D) 7
2. A program should not have any bugs that inhibit its function is called as \_\_\_\_\_ [     ]  
 A) firmness                                      B) commodity  
 C) delight                                      D) none of these

3. A program should suitable for the purposes for which it was intended is called as\_\_\_\_\_ [     ]  
A) firmness                                      B) commodity  
C)delight   D) none of these
4. The experience of using the program should be a pleasurable one. Which one is suitable for this statement [     ]  
A) firmness                                      B)commodity  
C)delight   D)none of these
5. Which is not suitable for design concepts ? [     ]  
A) abstraction                                  B) modularity  
C) pattern                                        D) knowledge
6. The importance of the software design can be stated with a single word i.e\_\_\_\_\_ [     ]  
A) quality                                        B)design  
C) software                                      D)none of these
7. Software design requirements are translated into a \_\_\_\_for constructing the software [     ]  
A) blue print                                    B) non blue print  
C) A or B   D) none of these
8. Who develop set of software quality attributes [     ]  
A) henlef- packard                            B) Robert piroig  
C) ferguson                                     D) none
9. In FURPS quality attribute F stands for\_\_\_\_\_ [     ]  
A) functionality                                B) reliability  
C) performance                                 D) none
10. How many attributes present in FURPS [     ]  
A) 1    B) 2  
C) 5    D) 6
11. In which level of abstraction a solution stated in broad terms using the language of the problem environment [     ]  
A) highest                                        B) lowest  
C) both A&B                                     D) none
12. \_\_\_\_\_abstraction refers to a sequence of the instructions that have a specific and limited function [     ]  
A) procedural                                    B) data  
C) both A& B                                    D) none
13. Software architecture is\_\_\_\_\_ [     ]  
A) overall structure of the software        B) small information of the software

- C) functionality of the software                      D) none
14. Refinement is \_\_\_\_\_ design                      [     ]  
A) top down                      B) bottom up  
C) step wise                      D) none
15. Independence is assessed using two qualitative criteria what are they                      [     ]  
A) cohesion                      B) coupling  
C) both A&B                      D) none
16. How many dimensions present in design model                      [     ]  
A) 1                      B) 2  
C) 3                      D) 4
17. Which model having process and abstraction dimensions                      [     ]  
A) architectural                      B) design  
C) incremental                      D) none
18. Design model elements are                      [     ]  
A) data design                      B) architectural design  
C) interface design                      D) all of the above
19. Data mining techniques is also known as \_\_\_\_\_                      [     ]  
A) KDD                      B) knowledge discovery in databases  
C) both A&B                      D) none
20. In pipe and filter structure which is used for through transport the data?                      [     ]  
A) filter                      B) pipe  
C) pipe & filter                      D) none
21. Architectural patterns are \_\_\_\_\_                      [     ]  
A) concurrency                      B) persistency  
C) distributing                      D) all
22. A component is a modular building block for computer \_\_\_\_\_                      [     ]  
A) software                      B) hardware  
C) structure                      D) none
23. In the context of object oriented software engineering a component contains a set of \_\_\_\_\_ classes                      [     ]  
A) collaborating                      B) non collaborating  
C) elaborating                      D) none
24. A conventional component also called \_\_\_\_\_                      [     ]  
A) control                      B) model  
C) problem                      D) function

25. \_\_\_\_\_ component that coordinates the invocation of all other problem domain  
Components [     ]
- A) problem domain            B) central  
C) infrastructure            D) none
26. \_\_\_\_\_ component that implements a complete as partial function that is required  
by the customer [     ]
- A) control                    B) problem domain  
C) infrastructure            D) none
27. Object oriented components, conventional software components are divide from the Model [     ]
- A) angle size                B) design  
C) architecture              D) none
28. What type of abstraction are used in software design [     ]
- A) control                    B) data  
C) procedure                 D) All the above
29. Which is not suitable for the coupling categories [     ]
- A) content                    B) utility  
C) common                    D) control
30. Which is not suitable for cohesion types [     ]
- A) functional                B) layer  
C) communicational          D) stamp
31. \_\_\_ concentrates on maximising customer into technical requirements for software [     ]
- A) DFD                        B) ERD  
C) STD                         D) QFD
32. \_\_\_\_\_ model depicts information domain for the problem [     ]
- A) Scenario-based            B) Data  
C) Class-oriented             D) Flow oriented
33. \_\_\_\_\_ is object of analysis modelling [     ]
- A) Describing the requirements    B) Establishing the software designing  
C) Validating once the s/w is built    D) All the above
34. One of the following is defined as properties of a data object [     ]
- A) Data attribute              B) Data Dimensions  
C) Data repository            D) Data characteristics
35. A program should not have any bugs that inhibit its function is called as \_\_\_\_\_ [     ]
- A) Firmness                  B) commodity

- C) delight                      D) none of these
36. Which model has process and abstraction dimensions [     ]  
A) Architectural              B) design  
C) incremental                D) none
37. In the context of OOSE a component contains a set of \_\_\_\_\_ classes [     ]  
A) Collaborating              B) non collaborating  
C) elaborating                D) none
38. A conventional component also called \_\_\_\_\_ [     ]  
A) Control                      B) model  
C) problem                      D) function
39. Which is not suitable for the coupling categories [     ]  
A) Content                      B) utility  
C) common                      D) control
40. Which is not suitable for cohesion types [     ]  
A) Functional                    B) layer  
C) communicational            D) stamp

#### **UNIT-4**

#### **User interface design and coding &testing**

1. \_\_\_\_\_ design creates an effective communication medium between a human and a computer [     ]  
A) Architecture                B) Analysis  
C) Data                          D) User Interface
2. How many golden rules are available in user interface design? [     ]  
A) 2                                B) 5  
B) C) 3                          D) 10
3. \_\_\_\_\_ users does not have syntactic knowledge and some little semantic knowledge [     ]  
A) Novices                      B) intermittent  
B) C) frequent                D) None
4. The \_\_\_\_\_ users have reasonable semantic knowledge of the application but low of syntactic information [     ]  
A) Novices                      B) intermittent  
C) frequent                      D) None
5. Which process model is user for user interface design? [     ]  
A) Spiral                        B) Agile  
C) RAD                          D) Waterfall
6. What types of abstraction are used in software design [     ]  
A) control                        B) data

- C) procedural                      D) control, data and procedure
7. \_\_\_\_\_ is the set of activities that can be performed in advance and conducted systematically.  
A) Analysing                      B) Planning  
C) Designing                      D) Testing                      [     ]
8. \_\_\_\_\_ testing is conducted in each component in a software product.                      [     ]  
A) Unit                      B) Integration  
C) Validation                      D) System Testing
9. \_\_\_\_\_ testing is conducted on the design and construction of software architecture.                      [     ]  
A) Black - box                      B) Integration  
C) Validation                      D) System Testing
10. \_\_\_\_\_ testing is conducted where the software and other system elements are tested.                      [     ]  
A) Unit                      B) Integration  
C) Validation                      D) System Testing
11. The individual or organisation who wants a product to be developed is known as [     ]  
A) Developer                      B) User  
C) Client                      D) Initiator
12. The final form of testing COTS software is \_\_\_\_\_ testing.                      [     ]  
A) Unit                      B) Integration  
C) Alpha                      D) Beta
13. In the maintenance phase the product must be tested against previous test cases. This is known as \_\_\_\_\_ testing.                      [     ]  
A) Unit                      B) Integration  
C) Regression                      D) Module
14. The degree of interaction between two modules is known as                      [     ]  
A) Cohesion                      B) Strength  
C) Instantiation                      D) Coupling
15. A design is said to be a good design if the components are                      [     ]  
A) Strongly Coupled                      B) Weakly Cohesive  
C) Strongly cohesive and Weakly coupled                      D) None
16. One of the fault based testing techniques is                      [     ]  
A) unit testing.                      B) beta testing.  
C) Stress testing.                      D) mutation testing.
17. All the modules of the system are integrated and tested as a complete system in the case of \_\_\_\_\_.  
A) Bottom up testing                      B) Top-down testing  
C) Sandwich testing                      D) Big-Bang testing                      [     ]



18. Non Incremental testing otherwise called as \_\_\_\_\_ [    ]  
A) Alpha Testing                      B) Beta Testing  
C) Big-Bang Testing                      D) None
19. \_\_\_\_ Testing conducted the test cases for each component. [    ]  
A) Integration                      B) Unit  
C) Alpha                      D) loop testing
20. \_\_\_\_\_ is forward the input to main function and proceed the output. [    ]  
A) Driver                      B) Skeleton  
C) Stub                      D) None
21. \_\_\_\_ is used as a mediator between the modules in Integration Testing. [    ]  
A) Driver                      B) Skeleton  
C) Stub                      D) None
22. Testing in 'small' it involves \_\_\_\_\_ in the class. [    ]  
A) Attributes & Operations                      B) only subclass  
C) Only high level modules                      D) None of the above
23. \_\_\_\_ Testing follows the DFS and BFS algorithm to test sub ordinate modules. [    ]  
A) Bottom-Up Integration                      B) Top- down Integration  
C) Sand Witch Integration                      D) Non-Incremental integration
24. \_\_\_\_\_ design creates an effective communication medium between a human and a computer [    ]  
A) Architecture                      B) Analysis  
C) Data                      D) User Interface
25. \_\_\_\_\_ users does not have syntactic knowledge and some little semantic knowledge [    ]  
A) Novices                      B) intermittent  
C) frequent                      D) None
26. \_\_\_\_ is the set of activities that can perform in advance and conducted systematically. [    ]  
A) Analyzing                      B) Planning  
C) Designing                      D) Testing
27. \_\_\_\_ testing conducted in each component in software product. [    ]  
A) Unit                      B) Integration  
C) Validation                      D) System Testing
28. \_\_\_\_ testing conducted on design and construction of software architecture. [    ]  
A) Black - box                      B) Integration  
C) Validation                      D) System Testing
29. \_\_\_\_ testing conducted where the software and other system elements are tested. [    ]  
A) Unit                      B) Integration

- C) Validation                      D) System Testing
30. The final form of testing COTS software is \_\_\_ testing [     ]
- A) Unit                                  B) Integration  
C) Alpha                                D) Beta
31. The degree of interaction between two modules is known as [     ]  
A) Cohesion                          B) Strength  
C) Instantiation                      D) Coupling
32. A design is said to be a good design if the components are [     ]  
A) Strongly Coupled                      B) Weakly Cohesive  
C) Strongly cohesive and Weakly coupled                      D) None
33. \_\_\_ is used as a mediator between the modules in Integration Testing. [     ]  
A) Driver                                B) Skeleton  
C) Stub                                  D) None
34. The process of uncovering errors diagnosing them and correcting them is called [     ]  
A) testing                                B) planning  
C)debugging                              D)designing
35. Recovery testing is a part of Integration testing. [     ]  
A) true                                  B) false  
C)Both A & B                          D)none.
36. In an object oriented testing strategy the focus of testing is. [     ]  
A) unit testing                              B) class testing  
C)package testing                        D)component testing
37. Software \_\_\_\_\_ is how easily a computer program can be tested. [     ]  
A) testability                              B) Operability  
C)Decomposability                        D)Stability
38. The \_\_\_\_\_ depicts logical control flow and is a notation for the representation of control flow. [     ]  
A) Basic path testing                      B) Flow graph notation  
C) Test case notation                      D) Control structure testing
39. One of the following is a metric used to estimate the cost or effort required to design, code and test the software. [     ]  
A) Number of external inquiries                      B) Lines of code  
C) Function based metric                      D) Defect related metric
40. Among the following which two are process metrics. [     ]  
A)lines of code and function points                      B)Effort and cost  
B) review hours and delivered source lines                      D) None

**UNIT-5****Software project management & Software maintenance**

1. COCOMO stands for \_\_\_\_\_ [     ]  
A) Customer cost model                      B) Constructive cost model  
C) Consistent cost model                    D) Configuration cost model
2. Which of the following uses empirically derived formulas to predict effort as a function of LOC or FP? [     ]  
A) FP- Based Estimation                      B) Process – Based Estimation  
C) COCOMO                                      D) Both FP-Based Estimation and COCOMO
3. Which one is not a size measure for software product? [     ]  
A) LOC    B) Halstead’s program length  
C) Function count                              D) Cyclomatic complexity
4. COCOMO was developed initially by \_\_\_\_\_ [     ]  
A) B. Beizer                                      B) Rajiv Gupta  
C) B.W. Bohem                                  D) Gregg Rothermal
5. COCOMO-II was developed at [     ]  
A) University of Texas                          B) University of Southern California  
C) MIT    D) IIT-Kanpur
6. Which one is not a stage of COCOMO-II? [     ]  
A) Early design estimation model            B) Application Composition estimation model  
C) Comprehensive cost estimation model   D) Post architecture estimation model
7. What all has to be identified as per risk identification? [     ]  
A) Threats    B) Vulnerabilities  
C) Consequences                                D) All of the above
8. Which one is not a risk management activity? [     ]  
A) Risk assessment                              B) Risk generation  
C) Risk control                                  D) None
9. What is the product of the probability of incurring a loss due to the risk and the potential magnitude of that loss? [     ]  
A) Risk exposure                                B) Risk prioritization  
C) Risk analysis                                 D) All of the above
10. What threatens the quality and timeliness of the software to be produced? [     ]  
A) Known risks                                  B) Business risks



22. The risk which gives the degree of uncertainty that the project schedule will be maintained and that the product will be delivered in time is \_\_\_\_\_  
[ ]  
A) Known risk    B) Unknown risk  
C) Schedule risk    D) Technical risk
23. Building an excellent product or system that no one really wants is \_\_\_\_\_ [ ]  
A) Technical risk    B) Business risk  
C) Known risk    D) Project risk
24. The audience to a formal review presentation consist of \_\_\_\_\_ [ ]  
A) Only technical staff                                    B) Only customer  
C) Analyst, developers and technical staff        D) customers, management and technical staff
25. In general the earlier a software error is discovered and corrected the less costly to the overall \_\_\_\_\_ [ ]  
A) Project budget    B) project planning  
C) Risk    D) none
26. Six Sigma methodology defines three core steps. \_\_\_\_\_ [ ]  
A) analyze, improve, control                            B) analyze, design, verify  
C) define, measure, analyze                            D) define, measure, control
27. Software project management begins with a set of activities that are collectively called\_\_\_\_ [ ]  
A) Estimation    B) project planning  
C) project management                                    D) none
28. How many types of process data are there \_\_\_\_\_ [ ]  
A) 1    B) 2  
C) 3    D) 4
29. SSPI stands for \_\_\_\_\_ [ ]  
A) Statistical software process improvement        B) Special software process improvement  
C) Super software process improvement            D) Sub software process improvement
30. The most widely used function oriented metric is \_\_\_\_\_ [ ]  
A) function point    B) file point  
C) first point    D) none
31. The structure of estimation model is \_\_\_\_\_ [ ]  
A)  $E=A+B*(e_v)^c$     B)  $E=A+B*(e_c)^v$   
C)  $E=A+B*(e_v)^v$     D)  $E=A+B*(e_c)^c$
32. PERT stands for \_\_\_\_\_ [ ]  
A) Project evaluation and review technique        B) Planning evaluation and review  
technique  
C) Project evaluation and risk technique            D) none of the above
33. Risk always involves two characteristics \_\_\_\_\_ [ ]  
A) Uncertainty, loss                                        B) Planning, control  
C) Improve, loss    D) certainty, loss
34. CPM stands for \_\_\_\_\_ [ ]  
A) Critical path method                                    B) Customer project method  
C) Capable path method                                    D) none
35. Risk projection is also called \_\_\_\_\_ [ ]  
A) Risk management                                        B) Risk estimation  
C) risk avoidance    D) Risk prevent
36. RIS stands for \_\_\_\_\_ [ ]  
A) Risk instruction sheet                                    B) Risk in standards  
C) Risk information sheet                                D) none
37. Which factors affect the probable consequences likely if a risk does occur? [ ]

- A) risk cost  
C) risk resources
38. Risk projection attempts to rate each risk in two ways [     ]  
A) likelihood and size  
B) likelihood and probability  
C) likelihood and impact  
D) likelihood and mitigation
39. SEI stands for \_\_\_\_\_ [     ]  
A) Software Enterprise Inc  
B) Software Engineering institute  
C) Software Enterprise integration  
D) Software Engineering integration
40. RMMM is stands for \_\_\_\_\_ [     ]  
A) Risk mitigation, monitoring & management plan  
B) Risk management mean model  
C) Risk mitigation management method  
D) none

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