Dr. D.Y.Patil Institute of Technology, Pimpri, Pune-411018

DEPARTMENT OF COMPUTER ENGINEERING

Subject : Software Engineering Class: SE

Semester: II

MCQ Question bank (UNIT 2)

Q.1. FAST stands for

- 1. Functional Application Specification Technique
- 2. Fast Application Specification Technique
- 3. Facilitated Application Specification Technique
- 4. None of the mentioned

Answer:- (3)

Q.2. What are the four dimensions of Dependability?

- 1. Usability, Reliability, Security, Flexibility
- 2. Availability, Reliability, Maintainability, Security
- 3. Availability, Reliability, Security, Safety
- 4. Security, Safety, Testability, Usability

Answer:- (3)

Q.3. What is the first step of requirement elicitation?

- 1. Identifying Stakeholder
- 2. Listing out Requirements
- 3. Requirements Gathering
- 4. All of the mentioned

Answer:- (1)

Re 1. 2. 3. 4.	equirements Expression (CORE). Functional, Non-Functional User, Developer Known, Unknown All of the mentioned nswer:- (1)	are	the	two	view	points	discussed	in	Controlled
1. 2. 3. 4.	Use Cases Entity Relationship Diagram State Transition Diagram Activity Diagram nswer:- (4)	am s	etudie	ed in I	Requir	ement A	analysis ?		
1. 2.	2.6. Requirements should specify 'what' True False nswer:- (1)	but	not 'l	now'.					
Sp 1. 2. 3. 4.	Complete	oes 1	not c	orresp	oond t	o a goo	d Software	e Re	equirements
 2. 3. 4. 	2.8. The SRS is said to be consistent if and its structure and style are such that any retaining the style and structure every requirement stated therein is one every requirement stated therein is verified to subset of individual requirements denswer:- (4)	cha that fiabl	inges the s le	oftwa	are sha	ll meet		de e	easily while
Q .	9.9. The SRS document is also known as black-box				_ spec	cification	1.		

- 2. white-box
- 3. grey-box
- 4. none of the mentioned

Answer:- (1)

Q.10. Which of the following is not included in SRS?

- 1. Performance
- 2. Functionality
- 3. Design solutions
- 4. External Interfaces

Answer:- (3)

- **Q.11.** Consider the following Statement: "The data set will contain an end of file character." What characteristic of SRS is being depicted here?
- 1. Consistent
- 2. Non-verifiable
- 3. Correct
- 4. Ambiguous

Answer:- (2)

- **Q.12.** Consider the following Statement: "The product should have a good human interface." What characteristic of SRS is being depicted here?
- 1. Consistent
- 2. Non-Verifiable
- 3. Correct
- 4. Ambiguous

Answer:- (2)

- Q.13. Why is Requirements Management Important? It is due to the changes
- 1. to the environment
- 2. in technology
- 3. in customer's expectations
- 4. in all of the mentioned.

Answer:- (4)

- **Q.14.** Requirements Management is a prerequisite for Quality-Oriented Development.
- 1. True
- 2. False

Answer:- (1)
Q.15. Requirements traceability is one of the most important part requirement management. It may also be referred to as the heart of requirement management. 1. True 2. False Answer:- (1)
Q.16. The Unified Modeling Language (UML) has become an effective standard for software modelling. How many different notations does it have? 1. Three 2. Four 3. Six 4. Nine Answer:- (4)
 Q.17. Which model in system modelling depicts the dynamic behaviour of the system ? 1. Context Model 2. Behavioral Model 3. Data Model 4. Object Model Answer:- (2)
 Q.18. Which model in system modelling depicts the static nature of the system? 1. Behavioral Model 2. Context Model 3. Data Model 4. Structural Model Answer:- (4)
Q.19. The UML supports event-based modeling using diagrams. 1. Deployment 2. Collaboration 3. State chart 4. All of the mentioned Answer:- (3)

 Q.20. Model-driven engineering is just a theoretical concept. It cannot be converted into a working/executable code. 1. True 2. False Answer:- (2)

- Q.21 How the interviews held between two persons across the table is...
- A. Written
- B. Non-structured
- C. One-to-one
- D. Group

Answer C

- Q.22. The computer-based system can have a profound effect on the design that is chosen and also the implementation approach will be applied.
- A. Behavioral elements
- B. Flow-oriented elements
- C. Scenario-based elements
- D. Class-based elements

Answer A

- Q.23 Which one of the following is a functional requirement?
- a) Maintainability
- b) Portability
- c) Robustness
- d) None of the mentioned

Answer: d.

- Q.24 Which one of the following is a requirement that fits in a developer's module?
- a) Availability
- b) Testability
- c) Usability
- d) Flexibility

Answer: b

- $\mathbf{Q.25}$. "Consider a system where, a heat sensor detects an intrusion and alerts the security company." What kind of a requirement the system is providing?
- a) Functional
- b) Non-Functional
- c) Known Requirement

d) None of the mentioned
Answer: a

Q.26Which of the following statements explains portability in non-functional requirements?

- a) It is a degree to which software running on one platform can easily be converted to run on another platform
- b) It cannot be enhanced by using languages, OS' and tools that are universally available and standardized
- c) The ability of the system to behave consistently in a user-acceptable manner when operating within the environment for which the system was intended
- d) None of the mentioned

Answer: a

Q.27 Functional requirements capture the intended behavior of the system.

- a) True
- b) False

Answer: a.

Q.28 Choose the incorrect statement with respect to Non-Functional Requirement(NFR).

- a) Product-oriented Approach Focus on system (or software) quality
- b) Process-oriented Approach Focus on how NFRs can be used in the design process
- c) Quantitative Approach Find measurable scales for the functionality attributes
- d) Qualitative Approach Study various relationships between quality goals

Answer: c

 ${\bf Q.29}$ How many classification schemes have been developed for NFRs?

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

View Answer

Answer: d

 ${\bf Q.30}$ According to components of FURPS+, which of the following does not belong to S ?

- a) Testability
- b) Speed Efficiency
- c) Serviceability
- d) Installability

Answer:b

Q.31. Does software wear & tear by decomposition ?a) Yesb) No
Answer: b
Q.32. Choose the correct statement on how NFRs integrates with Rational Unified Process? a) System responds within 4 seconds on average to local user requests and changes in the environment b) System responds within 4 seconds on average to remote user requests and changes in the environment c) All of the mentioned d) none of the mentioned
Answer: b
Q.33 .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
Answer: c.
Q.34. QFD works best if it has management commitment.a) Trueb) False
Answer: a Explanation: QFD involves heavy investment in initial stages, thus bounding the management to provide appropriate funding for the development process .
 Q. 35. Which of the following Requirement Elicitation Techniques is applicable to messy, changing and ill-defined problem situations? a) Quality Function Deployment (QFD) b) Prototyping c) Soft Systems Methodology (SSM) d) Controlled Requirements Expression (CORE)
Answer: c Q. 36 The Unified Modeling Language (UML) has become an effective standard for software modelling. How many different notations does it have ? a) Three b) Four

c) Six

d) Nine
Answer: d Q. 37. Which model in system modelling depicts the dynamic behaviour of the system? a) Context Model b) Behavioral Model c) Data Model d) Object Model Answer: B
 Q. 38 Which model in system modelling depicts the static nature of the system? a) Behavioral Model b) Context Model c) Data Model d) Structural Model
Answer: d
 Q. 39 Which perspective in system modelling shows the system or data architecture. a) Structural perspective b) Behavioral perspective c) External perspective d) All of the mentioned
Answer: a.
${f Q.~40}.$ Activity diagrams are used to model the processing of data. a) True b) False
Answer: a
 Q. 41 Model-driven engineering is just a theoretical concept. It cannot be converted into a working/executable code. a) True b) False
Answer: b

 $\mathbf{Q.~42}$ The UML supports event-based modeling using _____ diagrams. a) Deployment b) Collaboration

c) State chart

d) All of the mentioned Answer: c Q. 43Which 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 Answer: b ${f Q.~44}$ ______ allows us to infer that different members of classes have some common characteristics. a) Realization b) Aggregation c) Generalization d) dependency Answer: c Q. 45. One creates Behavioral models of a system when you are discussing and designing the system architecture. a) True b) False Answer: b ${f Q.46}$ _____ & ____ diagrams of UML represent Interaction modeling. a) Use Case, Sequence b) Class, Object c) Activity, State Chart d) All of the mentioned View Answer

Q. 47 Which level of Entity Relationship Diagram (ERD) models all entities and relationships?

Answer: a

a) Level 1 b) Level 2 c) Level 3 d) Level 4

Answer: b	
Q. 48 controller b) Entity c) Boundary d) Business	classes are used to create the interface that the user sees and interacts with as the
Answer: c	
(CRC) modeling? a) All use-case scenar modelling b) The review leader	collowing statement is incorrect regarding the Class-responsibility-collaborator rios (and corresponding use-case diagrams) are organized into categories in CRC reads the use-case deliberately the review (of the CRC model) are given a subset of the CRC model index cards ed
Answer: c	
Q. 50. A data object a) True b) False Answer: b.	can encapsulates processes and operation as well.

Unit 2
1. Which of the following is correct for the types of requirements?
A. Reliability B. Availability C. Usability D. All of the above
2. A stakeholder is anyone who will purchase the completed software system under development.a) Trueb) False
3. Which is one of the most important stakeholder from the following?a) Entry level personnelb) Middle level stakeholderc) Managersd) Users of the software
4. Various tasks that are carried out during requirement engineering process are:
a. feasibility study
b. requirement gathering
c. software requirement specification
d. all of these
5requirements describe the functionality or system services
a. System
b. Functional
c. Non functional
d. User

6. _____requirements describe the system properties and constraints

a. System
b. Functional
c. Non Functional
d. User
7. DFD stands for
a. Data flow Deployment
b. Data flow Design
c. Data flow diagram
d. Data flow drawing
8. Which of these steps is includes in the Requirement engineering process A. Requirement Gathering B. Feasibility study C. Validation D. Both A & B
 9. In the elicitation process, the developers discuss with the client and end users and know their expectations for the software. A. Organizing requirements B. Requirement gathering C. Negotiation & discussion D. Documentation
 10. Which the process to gather the software requirements from the client, analyze and document them is known as A. Software system analyst B. User interface requirements C. Requirement elicitation process D. Requirement engineering process
11. The goal of requirements analysis and specification is
a. to analyse the cost of the project
b. to analyze the schedule of the project
c. to understand the customer requirements and document them
d. to determine the scope of the project
12. The process gather the software requirements from client, analyse and document them is known as
a. requirement engineering

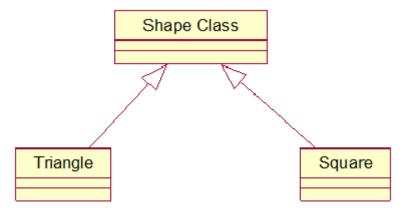
b. requirement elicitation
c. user interface requirement
d. software system analyst
13andare the two issues of requirement analysis.
a. Performance, design
b. Stakeholder, developer
c. Functional, Non functional
14. The term is used to refer to ant person or group who will be affected by the system directly or indirectly
a. user
b. customer
c. administrator
d. stakeholder
15. "Consider a system where a heat sensor detects an intrusion and alerts the security company". What kind of requirement the system is providing
a. Functional
b. Non functional
c. None of the above
16. What DFD notation is represented by rectangle
a. Data flow
b. Data store
c. Process
d. None of the mentioned
17. In DFDs, user interactions with the systems is denoted by
a. Circle
b. arrow
c. rectangle
d. triangle
18. Behavioural model provides view of the system
a. dynamic
b. static
c. cost effective

d. none of these
 19. Use case description consists of the following (A) Actors (B) Number and Use case name (C) Need and stakeholder (D) Both a and b (E) All of the above
 20. Requirements prioritization and negotiation belongs to? A). Feasibility study B). Requirements elicitation C). Requirements validation D). Requirements reviews
21. How many levels of DFD is?
A. 2 B. 3 C. 4 D. 5 22. Which of the following is not a component in DFD?
A. Entities B. Attributes C. Process D. Data Flow
23. What is level 2 in DFD means?
 A. Highest abstraction level DFD is known as Level 2. B. Level 2 DFD depicts basic modules in the system and flow of data among various modules. C. Level 2 DFD shows how data flows inside the modules mentioned in Leve 1. D. All of the above
24. The context diagram is also known as
A. Level-0 DFD B. Level-1 DFD C. Level-2 DFD D. All of the above
25. A directed arc or line in DFD represents

A. Data Store B. Data Process C. Data Flow D. All of the above
 26. The of a relationship is 0 if there is no explicit need for the relationship to occur or the relationship is optional. a) modality b) cardinality c) entity d) structured analysis
 27. A is a graphical representation that depicts information flow and the transforms that are applied as data moves from input to output. a) data flow diagram b) state transition diagram c) control specification d) workflow diagram
28. Which of the following UML diagrams has a static view?a) Collaborationb) Use casec) State chartd) Activity
29. What type of core-relationship is represented by the symbol in the figure below?
◆

- a) Aggregationb) Dependency
- c) Generalization
- d) Association

30. What type of relationship is represented by Shape class and Square?



- a) Realization
- b) Generalization
- c) Aggregation
- d) Dependency
- **31.** Which of the following diagram is time oriented?
- a) Collaboration
- b) Sequence
- c) Activity
- d) None of the mentioned
- 32. A Class consists of which of these abstractions?
- a) Set of the objects
- b) Operations
- c) Attributes
- d) All of the mentioned

33.