



GOVERNMENT POLYTECHNIC, CHAPRA

Marhowrah, Saran, Bihar



SOFTWARE ENGINEERING
SUBJECT CODE – 2018602

6th SEM – Computer Science and Engineering

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1. Software is defined as _____
 - a) set of programs, documentation & configuration of data
 - b) set of programs
 - c) documentation and configuration of data
 - d) None of the mentioned

2. What is Software Engineering?
 - a) Designing a software
 - b) Testing a software
 - c) Application of engineering principles to the design a software
 - d) None of the above

3. Who is the father of Software Engineering?
 - a) Margaret Hamilton
 - b) Watts S. Humphrey
 - c) Alan Turing
 - d) Boris Beizer

4. What is a Functional Requirement?
 - a) specifies the tasks the program must complete
 - b) specifies the tasks the program should not complete
 - c) specifies the tasks the program must not work
 - d) All of the mentioned

5. What does SDLC stands for?
 - a) System Design Life Cycle
 - b) Software Design Life Cycle
 - c) Software Development Life Cycle
 - d) System Development Life cycle

6. Who proposed the spiral model?
 - a) Barry Boehm
 - b) Pressman
 - c) Royce
 - d) IBM

7. ____ suits the Manifesto for Agile Software Development.
 - a) Customer collaboration
 - b) Individuals and interactions
 - c) Working software
 - d) All of the mentioned

8. ____ is not suitable for accommodating any change?
 - a) RAD Model
 - b) Waterfall Model
 - c) Build & Fix Model
 - d) Prototyping Model

9. What is the full form of the “COCOMO” model?
 - a) Cost Constructive Estimation Model
 - b) Constructive Cost Estimation Model
 - c) Constructive Case Estimation Model
 - d) Constructive Cost Estimating Model

10. . Which of the following document contains the user system requirements?
 - a) SRD
 - b) DDD
 - c) SRS
 - d) SDD

11. The word which describes the importance of software design is?
 - a) Complexity
 - b) Quality
 - c) Efficiency
 - d) Accuracy

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 Prototyping Model & RAD Model

13. “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

14. Does software wear & tear by decomposition?
 - a) Yes
 - b) No

15. ____ and ____ are the two issues of Requirement Analysis.
 - a) Performance, Design
 - b) Stakeholder, Developer
 - c) Functional, Non-Functional
 - d) None of the mentioned

16. Requirements should specify ‘what’ but not ‘how’.
 - a) True
 - b) False

17. Who controls the FAST (Facilitated Application Specification Techniques) meeting?
 - a) System Analyst
 - b) Scribe
 - c) Facilitator (a customer/developer/an outsider)
 - d) Manager

18. Software costs more to maintain than it does to develop.
 - a) True
 - b) False
19. Purpose of process is to deliver software
 - a) in time
 - b) with acceptable quality
 - c) that is cost efficient
 - d) both in time & with acceptable quality
20. What are attributes of good software?
 - a) Software maintainability
 - b) Software functionality
 - c) Software development
 - d) Software maintainability & functionality
21. What are the characteristics of Software? Explain various categories of software?
22. What is SDLC? Explain all the phases of SDLC.
23. What are different SDLC models available?
24. What is Cohesion and Coupling? Discuss all the types of Cohesion and coupling.
25. What is Black box testing and White box testing? How is Verification different from Validation?
26. What is SRS? Explain structure of SRS. Which type of requirements does a SRS consist of?
27. What is COCOMO model? Define an estimation of software development effort for organic software in the basic COCOMO model?
28. What is Cyclomatic Complexity? Mention different formulas to calculate the Cyclomatic complexity of a program?
29. What is difference between error, bug and failure? Explain Debugging.
30. What is CMM? Discuss all the five process levels of CMM.
31. What is regression testing? Black box testing always focuses on which requirement of software?
32. Define the term WBS? What are the three essential components of a software project plan?
33. Which model does risk analysis? What are the drawbacks of the spiral model?
34. What is Data Flow Diagram? Demonstrate with help of an example using the symbols of DFD.
35. Explain the concept of modularization. What are functional and non-functional requirements?
36. Describe the Agile methodology and its benefits. What are the challenges in software Engineering?

37. What are the disadvantages of classic life cycle model? What are the merits of the incremental model?
38. What is Equivalence class Partitioning? It comes under which type of testing? Distinguish between Alpha and Beta testing.
39. Explain some important activities that a software project manager performs during software project planning.
40. What is the critical path? Explain. Also describe the Critical Path Method with example.
41. Describe function point Analysis and Lines of Code.
42. Who are Project Stakeholders? List essential skills required for the project manager?
43. How can you collect project requirements?
44. What is the hierarchy for testing in terms of cost and speed? Show through a diagram.
45. What are the types of system testing? Explain
46. What are the various software design approaches? Discuss decision table.
47. How configuration and release management is done?
48. Explain the User interface testing. What are tools for version control?
49. Write selection criteria for software process model.
50. How is risk managed in the software engineering?
51. What is the document that is input in designing phase? Explain requirement elicitation.
52. Explain the waterfall model in detail. What is the disadvantage of waterfall model?
53. What are the major responsibilities of software project manager?
54. What is Release planning?
55. What is code review?
56. Explain Project scheduling. What is software documentation?
57. Explain types of black box testing.
58. What is activity network diagram? What are the steps required to make an activity diagram?
59. What are coding standards and guidelines?
60. Explain data Modelling design concepts:
 - a) Abstraction

b) Information hiding