B.Tech DEGREE EXAMINATION, MAY 2024

Seventh Semester

18MBH464J - IT PROJECT MANAGEMENT

(For the candidates admitted during the academic year 2018-2019 to 2021-2022)

Note:

i. **Part - A** should be answered in OMR sheet within first 40 minutes and OMR sheet should be handed over to hall invigilator at the end of 40th minute.

ii. **Part - B** and **Part - C** should be answered in answer booklet.

Time: 3 Hours   Max. Marks: 100

PART - A (20 × 1 = 20 Marks)
Answer all Questions

		Marks	BL	CO

1. Define Agile scrum methodology.   1   1   1
   (A) project management that emphasizes incremental progress
   (B) project management that emphasizes decrement-al progress
   (C) project management that emphasizes neutral progress
   (D) project management that emphasizes no progress

2. What are the features of Software Code?   1   1   1
   (A) Simplicity
   (B) Accessibility
   (C) Modularity
   (D) Icon

3. CASE stands for   1   1   1
   (A) Computer-Aided Software Engineering
   (B) Control Aided Science and Engineering
   (C) Cost Aided System Experiments
   (D) Unit Testing

4. Every task that is scheduled should be assigned to a specific team member is termed as   1   1   1
   (A) Compartmentalization
   (B) Defined milestones
   (C) Defined responsibilities
   (D) Defined outcomes

5. Ensuring that no more than the allocated number of people are allocated at any given time in Software Scheduling is known as   1   1   2
   (A) Time Allocation
   (B) Effort Validation
   (C) Defined Milestone
   (D) Effort Distribution

6. What evaluates the risk associated with the technology to be implemented as part of project scope?   1   1   2
   (A) Concept scoping
   (B) Preliminary concept planning
   (C) Technology risk assessment
   (D) Customer reaction to the concept

7. For a project activity the optimistic pessimistic and most likely times are 4,14 and 6 days are respectively what is the expected time?   1   3   2
   (A) 10 days
   (B) 7days
   (C) 9days
   (D) 2days

8. In the time-cost optimization, using CPM method for network analysis, the crashing of the activities along the critical path is done starting with the activity having   1   1   2
   (A) Longest duration
   (B) Highest cost slope
   (C) Least cost slope
   (D) Shortest duration

9. Which of the following term is best defined by the statement: "The underlying technology on which the system is built is superseded by new technology."?   1   1   3
   (A) Technology change
   (B) Product competition
   (C) Requirements change
   (D) Crashing time

10. What assess the risk and your plans for risk mitigation and revise these when you learn more about the risk?   1   1   3
(A) Risk monitoring
(B) Risk planning
(C) Risk analysis
(D) Risk identification

11. Which of the following risks are derived from the organizational environment where the software is being developed?   1   1   3
(A) People risks
(B) Technology risks
(C) Estimation risks
(D) Organizational risks

12. In which sort of project is the use of a Gantt chart most appropriate?   1   1   3
(A) Projects in which the use of resources must be carefully monitored.
(B) Projects with few activities and resources involved.
(C) Projects where the time periods involved are very short.
(D) projects with many activities involved.

13. How is plan driven development different from agile development?   1   1   4
(A) Outputs are decided through a process of negotiation during the software development process
(B) Specification, design, implementation and testing are interleaved
(C) Iteration occurs within activities
(D) Iconic model

14. How many phases are there in Scrum ?   1   1   4
(A) Two
(B) Three
(C) Four
(D) Scrum is an agile method which means it does not have phases

15. Which of the following does not apply to agility to a software process?   1   1   4
(A) Uses incremental product delivery strategy
(B) Only essential work products are produced
(C) Eliminate the use of project planning and testing
(D) Task risk

16. Which three framework activities are present in Adaptive Software Development(ASD) ?   1   1   4
(A) analysis, design, coding
(B) requirements gathering, adaptive cycle planning, iterative development
(C) speculation, collaboration, learning
(D) Earning before Tax

17. The optimum duration is the   1   1   5
(A) the summation of normal-duration of each activity in the project
(B) summation of the normal-duration of activities on critical path
(C) one, which gives the minimum total cost for completing the project
(D) summation of crash-time of activities on critical path

18. what is the full form of devOps?   1   1   5
(A) Development and Operations
(B) Digital and operations
(C) Drive and Operations
(D) Direct and Operations

19. Which of the following methods can not be tested by Junit test class   1   1   5
(A) Protected methods
(B) Private Methods
(C) Public Methods
(D) Posted Methods

20. Which of the following methods can not be part of DevOps life cycle---------------?   1   1   5
(A) Operating
(B) Plan
(C) Build
(D) Code

PART - B (5 × 4 = 20 Marks)

		Marks	BL	CO
21.	Bring out the differences between software projects and other projects.	4	1	1
22.	Discuss the broad categories of risk and suggest ways to overcome them.	4	1	2
23.	Explain the importance of project termination.	4	1	2
24.	List the common agile practices and explain any one in detail.	4	1	3
25.	Explain briefly the working of DevOps.	4	1	4
26.	Explain the steps involved in the prototyping process.	4	1	5
27.	Compare Unit Testing and Integration Testing and explain the related processes	4	1	5

PART - C (5 × 12 = 60 Marks)
Answer **all** Questions

      Marks BL   CO

28. (a) Compare the V-model of SDLC with the respective stages of the waterfall model   12   1   1

(OR)

(b) With a neat sketch, illustrate the various stages of the waterfall model of SDLC.

29. (a) A project schedule has the following characteristics. Draw the network diagram and find total float the critical path.   12   1   2

Activity	1-2	1-3	2-4	3-4	3-5	4-5	4-6	5-6
Time(days)	6	5	10	3	4	6	2	9

(OR)

(b) A project has the following activities and other characteristics:

Estimated Duration (in weeks)			
Activity(i-j)	Optimistic	Most likely	Pessimistic
1-2	1	1	7
1-3	1	4	7
1-4	2	2	8
2-5	1	1	1
3-5	2	5	14
4-6	2	5	8
5-6	3	6	15

(i) What is the expected project length? Find Expected time and variance of each Activity.

30. (a) Bring out the different testing phases that are executed in a software development project.   12   1   3

(OR)

(b) Elaborate on the different principles involved in managing risks in IT projects

31. (a) Explain Agile framework in detail and elucidate its principles.   12   1   4

(OR)

(b) List the common agile practices and explain each one in detail.

32. (a) Define SCRUM. Discuss its methodologies employed in IT projects.   12   1   5

(OR)

(b) Illustrate the life cycle approach of DevOps. Discuss its advantages and disadvantages.

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