

**B.E. / B.Tech. - DEGREE EXAMINATIONS, APR / MAY 2025**

Seventh Semester

**Computer Science and Business Systems****20CBPW703 - IT PROJECT MANAGEMENT WITH LABORATORY**

Regulations - 2020

Duration: 3 Hours

Max. Marks: 100

**PART - A (MCQ) (10 × 1 = 10 Marks)**

Answer ALL Questions

- |   | <i>Marks</i> | <i>K – Level</i> | <i>CO</i> |
|---|--------------|------------------|-----------|
| 1. What is PERT analysis based on?<br>(a) Optimistic time (b) Pessimistic time (c) Most likely time (d) All of the above  | 1            | K1               | CO1       |
| 2. Which of the options is not a notable challenge while scheduling a project?<br>(a) Deadlines exist (b) Independent activities<br>(c) Too many workers may be required (d) Costly delay   | 1            | K1               | CO1       |
| 3. How resource leveling done in project management?<br>(a) Reduce resource requirements by smoothing out period-to-period resource assignments.<br>(b) Ensure that the budget abnormalities are overcome.<br>(c) Reduce the amount of resources so that they can be shared with on other endeavors.<br>(d) Increase the amount of the project manager's authority so that budget dollars can be appropriated.  | 1            | K1               | CO2       |
| 4. What is risk mitigation?<br>(a) Accepting the consequences of a risk without taking any action<br>(b) Transferring the impact of a risk to another party<br>(c) Reducing the probability and impact of a risk<br>(d) Avoiding any identification of risks in a project   | 1            | K1               | CO2       |
| 5. Which Agile framework is built around the idea of customer satisfaction through early and continuous delivery of valuable software?<br>(a) Scrum (b) Kanban (c) XP (d) Lean  | 1            | K1               | CO3       |
| 6. Lean methodology aims to:<br>(a) Maximize efficiency by eliminating waste<br>(b) Prioritize individuals and interactions over processes and tools<br>(c) Use fixed-length iterations called sprints<br>(d) None of the above   | 1            | K1               | CO3       |
| 7. Who is responsible for maximizing the value of the product and the work of the Development Team?<br>(a) Scrum Master (b) Product Owner<br>(c) Development Team (d) Stakeholders  | 1            | K1               | CO4       |
| 8. What is the primary role of Scrum Master?<br>(a) Manage the project budget<br>(b) Remove impediments and facilitate the Scrum process<br>(c) Write code and oversee development<br>(d) Prioritize user stories the team to work efficiently.   | 1            | K1               | CO4       |
| 9. Which statement best describes the role of Change Management within a DevOps environment?<br>(a) Nothing changes as a risk adverse Change Management approach is paramount to IT and business success.<br>(b) The moment an app change is asked for, the request should go to the Developers to authorise. Once authorised it goes to Operations for implementation.<br>(c) The moment an app change is asked for, the request should go out to everyone on the team, no matter which IT discipline they work in.<br>(d) None of the Above | 1            | K1               | CO5       |

10. Relate the extension of Devops. 1 K1 C05  
 (a) QA (b) Agile (c) Waterfall (d) None of the above

**PART - B (12 × 2 = 24 Marks)**

Answer ALL Questions

- |   |   |    |     |
|---|---|----|-----|
| 11. Compare PERT and CPM.   | 2 | K2 | C01 |
| 12. What is fast tracking?  | 2 | K1 | C01 |
| 13. Explain project crashing.                                       | 2 | K2 | C01 |
| 14. What is risk assessment matrix?                                 | 2 | K1 | C02 |
| 15. Compare direct cost and indirect cost.                          | 2 | K2 | C02 |
| 16. List any two methods of risk analysis and its features.         | 2 | K1 | C02 |
| 17. Define the principles of Agile Manifesto.                       | 2 | K1 | C03 |
| 18. Show the relationship between Agile Scrum and Lean.             | 2 | K2 | C03 |
| 19. What are the activities involved in backlog refinement meeting? | 2 | K1 | C04 |
| 20. List out the activities of sprint review meeting.               | 2 | K1 | C04 |
| 21. How CI/CD pipeline is integrated with Devops?                   | 2 | K1 | C05 |
| 22. Why Automated Testing is essential for CI/CD?                   | 2 | K1 | C05 |

**PART - C (6 × 11 = 66 Marks)**

Answer ALL Questions

- |           |        |   |    |    |     |
|-----------|--------|---|----|----|-----|
| 23.       | a)     | Explain in detail about the scheduling process done in PERT and steps for finding the longest path.                                   | 11 | K2 | C01 |
| <b>OR</b> |        |   |    |    |     |
|           | b)     | Classify various project management methodologies with real time example.   | 11 | K2 | C01 |
| 24.       | a)     | What is Resource Scheduling? Explain the steps how resource has been scheduled in project.  | 11 | K2 | C02 |
| <b>OR</b> |        |   |    |    |     |
|           | b)     | Explain cost control method how it projected in IT Project Management.  | 11 | K2 | C02 |
| 25.       | a)     | Explain the functionality of the lean framework and write the its advantages and disadvantages.                                       | 11 | K2 | C03 |
| <b>OR</b> |        |   |    |    |     |
|           | b)     | Summarize the XP extreme programming framework applied to agile environment and brief the features of XP and its merits and demerits. | 11 | K2 | C03 |
| 26.       | a)     | Organize the Sprint Planning meeting for scrum team and how planning poker estimation done during the planning phase.                 | 11 | K3 | C04 |
| <b>OR</b> |        |   |    |    |     |
|           | b)     | Identify the roles in Scrum: Scrum Master, Product Owner, and Development Team.   | 11 | K3 | C04 |
| 27.       | a)     | Build the various components of Docker Architecture.  | 11 | K3 | C05 |
| <b>OR</b> |        |   |    |    |     |
|           | b)     | Select any one automation Testing tool and method and Explain how it is integrated with CI/CD Pipeline.                               | 11 | K3 | C05 |
| 28.       | a) (i) | Identify the various activities in Product Backlog.   | 5  | K3 | C04 |
|           | (ii)   | Develop the use case of how Docker helpful in Media Entertainment.  | 6  | K3 | C05 |
| <b>OR</b> |        |   |    |    |     |
|           | b) (i) | Identify the various activities in Sprint Backlog.  | 5  | K3 | C04 |
|           | (ii)   | Develop the use case of how Docker helpful in Healthcare.   | 6  | K3 | C05 |