PROJECT MANAGEMENT QUESTION BANK ANSWERS (Version A with Detailed Q8)

1. A project is a temporary activity with a specific goal and defined start and end. Characteristics: specific objective, temporary, unique output, limited resources, involves uncertainty, planned tasks, teamwork.

2. The project manager plans, organizes, leads, communicates, monitors progress, handles risks, and ensures the project finishes on time, within budget, and with good quality.

3. Project lifecycle has stages: Initiation, Planning, Execution, Monitoring/Controlling, and Closure. These stages help manage the project step-by-step.

4. Feasibility study checks if a project is practical and profitable. Baseline plan is the approved schedule, scope, and cost used to measure actual performance.

5. Project selection methods: Benefit-Cost Ratio, Payback Period, NPV, and IRR. These help compare and choose the most profitable project.

6. Breakeven analysis finds the point where total cost equals total revenue. Project with lower breakeven point is preferred.

7. DCF methods calculate future money value in present value terms. Used to measure long-term project profitability. Includes NPV and IRR.

8. PERT and CPM in Project Management:

PERT (Program Evaluation and Review Technique) and CPM (Critical Path Method) are project scheduling techniques used to plan and control activities.

PERT:

- Used when activity time is uncertain.
- Applies three time estimates: Optimistic, Most Likely, and Pessimistic.
- Used in research and development projects where exact time cannot be predicted.
- Helps analyze risk and uncertainty in time estimation.

CPM:

- Used when activity time is known and fixed.
- Uses one definite time estimate for each activity.
- Applied in construction and industrial projects.
- Identifies the Critical Path, which determines minimum project duration.

Difference:

PERT focuses on time uncertainty; CPM focuses on both time and cost optimization.

9. PERT vs CPM: PERT uses uncertain time; CPM uses fixed time. PERT focuses on time; CPM on time and cost. PERT is for research; CPM for construction.

10. Schedule crashing means reducing project time by adding extra resources. Useful when deadlines are tight.

11. Critical path is the longest path in project schedule that determines total duration. Delay in critical path delays entire project.

12. Resource leveling balances resource usage to prevent overloading and ensure smooth workflow.

13. Time-cost trade-off means reducing time increases cost, and reducing cost may increase time. Managers find best balance.

14. Stakeholder analysis identifies all people affected by the project and their expectations to ensure cooperation and reduce conflict.

15. Risk management identifies, analyzes, and responds to risks. Decision trees help compare alternatives under uncertainty.

16. Contingency planning prepares backup strategies to handle unexpected problems and reduce damage.

17. Project quality management ensures output meets standards. Tools include checklists, control charts, audits, and cause-effect diagrams.

18. TQM focuses on continuous improvement and customer satisfaction. Six Sigma reduces defects using data and the DMAIC method.

19. Project planning defines scope, performs SWOT analysis, and prepares feasibility report to confirm if project is workable and profitable.

20. Vendor selection uses price comparison, quality rating, and negotiation. JIT procurement delivers materials only when needed to reduce storage cost.

21. Documentation keeps written project records; reporting shares progress. Helps in transparency and future reference.

22. Budgeting sets the total project cost. Cost estimation uses expert judgment, historical data, analogous and bottom-up estimation methods.

23. Earned Value Management compares planned work and actual work to check whether project is ahead/behind schedule or budget.

24. Project monitoring techniques include Gantt charts, milestone tracking, progress reports, and EVM to ensure project stays on track.

25. Change management handles scope changes through analysis and approval steps to avoid confusion and cost overruns.