

Duration 3 hrs

Total marks assigned to the paper 80

NB: Q. No.1 is compulsory.  
 Answer any three of the remaining five questions  
 Assume suitable data, if necessary

Q.1 Write Short notes on following (Any Four) (20)  
 (a) Work Breakdown Structure (WBS)  
 (b) Triple constraints in Project management  
 (c) Goldratt's critical chain  
 (d) Concurrent Engineering  
 (e) Project Audit  
 (f) Project Management Information System

Q.2(a) The table shows estimation of probability and likely impact of certain risks in a project of "Restoring and refurbishing a heritage building housing a museum" by project engineer of a city municipal corporation. Total project cost is Rs. 100 Million and duration is 1 year.

| Code | Risk   | Probability | Impact (Mn Rs) |
|------|--|-------------|----------------|
| A    | Damage to structural artwork of building                                   | 20%         | 15             |
| B    | Theft of or damage to antique items  | 60%         | 80             |
| C    | Structural deterioration more than expected                                | 80%         | 30             |
| D    | Loss of revenue due to delay in project                                    | 40%         | 5              |
| E    | Architect fees exorbitant due to likely increase in scope during execution | 60%         | 2              |

Devise a suitable impact scale and make a probability impact matrix and comment on the severity of each risk based on the same (10)

(b) List and briefly describe the ways projects may be terminated. What are some non technical reasons for project termination? (10)

Q.3 (a) Match the following and justify your selection in each case (10)

| Selection Model              | Project  |
|------------------------------|--|
| 1. Sacred cow                | a) Dettol liquid hand soap is launched in market   |
| 2. Operating necessity       | b) State bank launches State Bank Buddy App.   |
| 3. Competitive necessity     | c) Tata motors decided to make Rs.1 lakh car when Mr. Ratan Tata gave it as a challenge.   |
| 4. Product line extension    | d) Air India decided to buy Boing 787 after comparing with other models of Boing & Airbus. |
| 5. Comparative Benefit Model | e) ONGC buys new helicopters for oil rigs.   |

(b) What is a scope creep? How does formal change control system works in project management? (10)

Q.4 (a) What is a project life cycle? How does cost of change, risk and influence of stakeholders are affected with project time during the life cycle of a project? (10)

(b) What is the purpose of control in project management? What are the three main types of control system? What are characteristics of a good control system? (10)

Q.5 (a) A software development project at day 70 exhibits an actual cost of Rs. 78,000/- and the scheduled cost of Rs. 84,000/-. The software manager estimates the value of completed work to be Rs. 81,000/-. What are the cost and schedule variances and CSI? (5)

(b) Differentiate between the Functional, Pure Project and Matrix organizations. (10)

(c) Compare the top down budgeting and bottoms-up budgeting. (5)

Q.6 (a) Why communication is most important part of project manager's job? (5)

(b) What is crashing of the project? Explain with a small example the process of crashing (10)

(c) Explain the four stages of team development and growth? (5)

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