

BE (Civil) / Sem VIII / R-19 / SH 2023 / 16/12/2023

Time: 3-hour

Max. Marks: 80

- N.B :
- (1) Question No. 1 is Compulsory.
 - (2) Attempt any three questions out of the remaining five.
 - (3) All questions carry equal marks.
 - (4) Assume suitable data, if required, and state it clearly.
 - (5) Notations carry the usual meaning.

QP code: 43022

Q1. Answer the following (Any FOUR)

[20M]

- a) What are the three basic goals of a project and how do project managers achieve them in conditions of uncertainty?
 - b) Why project manager's role is more of a facilitator rather than a supervisor?
 - c) Explain the work breakdown structure.
 - d) What is Goldratt's critical chain method?
 - e) Briefly describe the purchasing cycle.
 - f) What are the four stages of team development and growth?
- Q2. (a) Swanson Industries has a potential project with an initial cost of Rs. 20,00,000. The capital budget allows to accept only one project. Using the NPV method, which project should be selected?

[10M]

Cash Flows (Year)	Project A	Project B	Project C	Project D
1	5,00,000	6,00,000	10,00,000	3,00,000
2	5,00,000	6,00,000	8,00,000	5,00,000
3	5,00,000	6,00,000	6,00,000	7,00,000
4	5,00,000	6,00,000	4,00,000	9,00,000
5	5,00,000	6,00,000	2,00,000	11,00,000
Discount Rate	6%	9%	15%	22%

- (b) What is the project life cycle? How is the cost of change, risk, and influence of stakeholders affected by Project time during the life cycle of the project? [10M]

Q3. (a) What are the responsibilities of the project auditor? What is essential for a successful project Audit? [10M]

Q3. (b) Explain probability and impact matrix. What are the risk response strategies for negative risks (threats) and positive risks (opportunities)? [10M]

Q4. (a) Following are the manpower requirements for each activity in a project.

Activity	Normal Time	Man Power Required
0-1	2	4
1-2	3	3
1-3	4	3
2-4	2	5
3-5	4	3
3-6	3	4
4-7	6	3
5-7	6	6
6-8	5	2
7-9	4	2
8-9	4	9

i) Draw the project network diagram.

ii) Rearrange the activity suitably to reduce the existing total manpower requirement. **[10M]**

Q4. (b) Differentiate between the Functional, Pure Project, and Matrix organizations. **[10M]**

Q5. (a) How communication is planned and managed in project management? **[10M]**

Q5. (b) A consulting project has an actual cost of Rs. 45000, Scheduled cost of Rs. 35000, and the value of completed work is Rs. 31000. Find the Scheduled and Cost Variance. Also, find SPI and CPI. **[5M]**

Q5. (c) State various project estimation and scheduling techniques. **[5M]**

Q6. (a) What is a scope creep? How does a formal change control system work in project management? **[10M]**

Q6. (b) List and briefly describe the ways the project may be terminated. What are some non-technical reasons for project termination? **[10M]**