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.
- Q1. Answer the following (Any FOUR).

[20M

- a) Explain the triple constraint in Project Management.
- b) Explain the Stages of team development & growth.
- c) Explain the work breakdown structure (WBS).
- d) Explain Goldratt's critical chain.
- e) Explain the earned value management technique for measuring the value of work.
- f) Explain multicultural and virtual projects.
- Q2. (a) ABC 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
1.8	6,00,000	5,00,000	10,00,000	3,00,000
2.	6,00,000	5,00,000	8,00,000	5,00,000
3.	6,00,000	5,00,000	6,00,000	7,00,000
S'4. A'	6,00,000	5,00,000	4,00,000	9,00,000
5.	6,00,000	5,00,000	2,00,000	11,00,000
Discount Rate	9%	6%	15%	22%

- Q2. (b) Discuss why project management is essential in today's business environment. What benefits does it provide in achieving organizational goals? [10M]
- Q3. (a) Explain Risk response strategies for positive and negative risks. [10M]
- Q3. (b) What is the importance of vendor documents? How the vendor documents should be preserved? [10M]

Q4. (a) The R & D project has a list of tasks to be performed whose time estimates are given in the table below. [10M]

Activity	Predecessor Activity	to	tm so	tp
A	- 0	2	4.0	6
В	A S	3 3	6	9
C	A	8	10	12
D	B	9	S 12 8	15
Е	SC S	- 8	9 0	10
F	D, E	16	21	26
G	D, E	19	22	25
Н	F	2	SV 5	8
I	G	1	49 3	5

- Draw the project network.
- 2. Find the critical path.
- 3. Find the time required to complete the following project and the critical activities.
- Q4. (b) Explain the aggregate project plan used in the portfolio process. [05M]
 Q4. (c) Explain the project buffer. [05M]
 Q5. (a) Explain the project management template with a sample template sheet. [10M]
 Q5. (b) Define Project Management Information Systems (PMIS) and evaluate its role in the successful execution of complex projects [05M]
 Q5. (c) Write a short note on the GANTT chart. [05M]
- Q6. (a) Why meetings are useful in project monitoring? What rules should be followed to maximize the effectiveness of meetings? [10M]
- Q6. (b) List and briefly describe the ways projects may be terminated. What are some nontechnical reasons for project termination? [10M]
