Time: 3-hour 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 usual meaning.

Q1. Answer the following (Any FOUR.)

[20M]

- a) What are the contents of project charter? who prepares and authorizes the project charter?
- b) Compare the top-down budgeting and bottom-up budgeting.
- c) What is Goldratt's critical chain method?
- d) Explain the significance of IRR method in project selection.
- e) Briefly describe the purchasing cycle.
- f) Explain the risk breakdown structure.
- Q2. (a) A consulting project has an actual cost of Rs. 35000, Scheduled cost Rs. 27000, and [5M] completed work is Rs. 31000. Find the Scheduled and Cost Variance. Also find SPI and CPI.
 - (b) What is a contract? Explain different types of contracts in brief. [5M]
 - (c) Consider a project having following cash flow stream. The cost of capital (r) for the firm is 10%. Calculate NPV of project and decide whether to accept or reject the project. [10M]

Year	0	1	2 🔾	3	4	5
CASH	10,00,000	2,00,000	2,00,000	3,00,000	3,00,000	3,50,000
Flow in Rs.	EBG C		80,	67		

- Q3. (a) What is project life cycle? how does cost of change, risk and influence of stakeholders are affected with Project time during the life cycle of project? [10M]
- Q3. (b) Explain probability and impact matrix. What are the risk response strategies foe negative risks (threats) and positive risks(opportunities). [10M]

Q4. (a) A small project is composed of 8 activities, whose time estimates are listed below.

Activity	Predecessor	to &	t m	tp
	_	5' 25		
A	- 64	3	6	9
В	- \$ ¹	5 8	7	8
С	A	6	9	12
D	A	6	12	15
Е	B	9	12	18
F	B	12	18	24
G	C, D, E	6	9	12
Н	C	3 2	6	9

- i) Draw the project network diagram. Find the critical path and expected project duration.
- ii) If the due date is 30 days. What is the probability that the project will be completed within the due date?
- iii) Find the probability of completing project between 26 to 31 days. [10M]
- Q4. (b) What are the non-numeric models of project selection? Expalin in brief. [5M]
- Q4. (c) Explain importance of ethics in projects. [5M]
- Q5. (a) How communication is planned and managed in project management? [10M]
- Q5. (b) What is life cycle of a project audit? what are responsibilities of project auditor?

 What is essential for successful project audit? [10M]
- Q6. (a) What are four stages of team development and growth? What are the barriers to team effectiveness? [10M]
- Q6. (b) List and briefly describe the ways project may be terminated. What are some non-technical reasons for project termination? [10M]
