

Code: 20HS7701G

**IV B.Tech - I Semester – Regular / Supplementary Examinations  
OCTOBER 2024**

**PROJECT MANAGEMENT  
(Common for ALL BRANCHES)**

Duration: 3 hours

Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.

2. All parts of Question must be answered in one place.

BL – Blooms Level

CO – Course Outcome

			BL	CO	Max. Marks
<b>UNIT-I</b>					
1	a)	Summarize project and explain various characteristics of project.	L2	CO1	7 M
	b)	Discuss the elements of project life-cycle.	L2	CO1	7 M
<b>OR</b>					
2	a)	Briefly explain project family tree and project appraisal.	L2	CO1	7 M
	b)	Describe the roles and responsibilities of project manager.	L2	CO1	7 M
<b>UNIT-II</b>					
3	a)	Discuss the analysis of project risks.	L2	CO2	7 M
	b)	Describe various types of market risks.	L2	CO2	7 M
<b>OR</b>					
4	a)	Describe the analysis of market risks.	L2	CO2	7 M
	b)	Discuss various types of firm risks.	L2	CO2	7 M

<b>UNIT-III</b>																																		
5	a)	Discuss the procedure for social cost-benefit analysis.	L2	CO3	7 M																													
	b)	Explain UNIDO approach used in cost-benefit analysis.	L2	CO3	7 M																													
<b>OR</b>																																		
6	a)	Discuss the main features of social cost-benefit analysis.	L2	CO3	7 M																													
	b)	Explain Little--Mirrless approach used in cost- benefit analysis.	L2	CO3	7 M																													
<b>UNIT-IV</b>																																		
7	a)	Define: optimistic time, pessimistic time and most likely time.	L1	CO1	6 M																													
	b)	<p>A project comprises of nine activities. The activity durations and their inter-relationships are presented in the table shown below.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Activity</th> <th>Duration</th> <th>Predecessor</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">8</td> <td style="text-align: center;">None</td> </tr> <tr> <td style="text-align: center;">B</td> <td style="text-align: center;">10</td> <td style="text-align: center;">None</td> </tr> <tr> <td style="text-align: center;">C</td> <td style="text-align: center;">9</td> <td style="text-align: center;">None</td> </tr> <tr> <td style="text-align: center;">D</td> <td style="text-align: center;">6</td> <td style="text-align: center;">A</td> </tr> <tr> <td style="text-align: center;">E</td> <td style="text-align: center;">8</td> <td style="text-align: center;">B</td> </tr> <tr> <td style="text-align: center;">F</td> <td style="text-align: center;">16</td> <td style="text-align: center;">B</td> </tr> <tr> <td style="text-align: center;">G</td> <td style="text-align: center;">14</td> <td style="text-align: center;">C</td> </tr> <tr> <td style="text-align: center;">H</td> <td style="text-align: center;">11</td> <td style="text-align: center;">D, E</td> </tr> <tr> <td style="text-align: center;">I</td> <td style="text-align: center;">4</td> <td style="text-align: center;">G</td> </tr> </tbody> </table> <p>(i) Draw the Network diagram. (ii) Determine the critical path and project completion time.</p>	Activity	Duration	Predecessor	A	8	None	B	10	None	C	9	None	D	6	A	E	8	B	F	16	B	G	14	C	H	11	D, E	I	4	G	L3	CO4
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**OR**

8	a)	Explain the crashing procedure taking a suitable example.	L2	CO4	6 M																																		
	b)	Consider the following Project. <table border="1" style="margin: 10px auto; width: 80%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="text-align: center;">Activity</th> <th colspan="3" style="text-align: center;">Time in days</th> </tr> <tr> <th style="text-align: center;">Optimistic</th> <th style="text-align: center;">Most Likely</th> <th style="text-align: center;">Pessimistic</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1-2</td> <td style="text-align: center;">8</td> <td style="text-align: center;">10</td> <td style="text-align: center;">18</td> </tr> <tr> <td style="text-align: center;">1-3</td> <td style="text-align: center;">13</td> <td style="text-align: center;">14</td> <td style="text-align: center;">15</td> </tr> <tr> <td style="text-align: center;">2-3</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">3-4</td> <td style="text-align: center;">5</td> <td style="text-align: center;">7</td> <td style="text-align: center;">15</td> </tr> <tr> <td style="text-align: center;">3-5</td> <td style="text-align: center;">7</td> <td style="text-align: center;">10</td> <td style="text-align: center;">19</td> </tr> <tr> <td style="text-align: center;">4-6</td> <td style="text-align: center;">10</td> <td style="text-align: center;">11</td> <td style="text-align: center;">12</td> </tr> <tr> <td style="text-align: center;">5-6</td> <td style="text-align: center;">3</td> <td style="text-align: center;">7</td> <td style="text-align: center;">11</td> </tr> </tbody> </table> <p style="margin-left: 20px;">           (i) Construct the Network diagram.            (ii) Determine the critical path.            (iii) Estimate the project completion time.            (iv) What is the probability of completing the project within 38 days?         </p>	Activity	Time in days			Optimistic	Most Likely	Pessimistic	1-2	8	10	18	1-3	13	14	15	2-3	1	2	3	3-4	5	7	15	3-5	7	10	19	4-6	10	11	12	5-6	3	7	11	L3	CO4
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**UNIT-V**

9	a)	Discuss the financial analysis of a project.	L2	CO5	7 M
	b)	Discuss the environmental dimensions of a project.	L2	CO5	7 M

**OR**

10	a)	Discuss the stresses on the environment.	L2	CO5	7 M
	b)	Discuss the environmental impact assessment methodologies.	L2	CO5	7 M