


<b>Name:</b>	
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**

**End Semester Examination, May 2024**

**Course: Project Management & Contract Administration**

**Semester: IV**

**Program: MBA (ALL)**

**Time: 03 Hrs.**

**Course Code: LSCM 8001**

**Max. Marks: 100**

**Instructions: Usage of calculator and graph paper allowed.**

**SECTION A**

**10Qx2M= 20 Marks**

S. No.		Marks	CO
Q 1	<i>Fill in the blanks. Each blank carries 2 marks..</i>		
1.1	A _____ is a graphical model depicting the interrelationship between the various elements of the Project Work System.	<b>2</b>	<b>CO1</b>
1.2	_____ involves monitoring and recording results of executing the quality activities to assess performance and recommend necessary changes.	<b>2</b>	<b>CO1</b>
1.3	_____ Reserves are not included in the project budget. (Choose the correct option: Management / Contingency)	<b>2</b>	<b>CO1</b>
1.4	_____ models are used to estimate how much the product (or project) will cost based on physical attributes e.g. weight, volume, power, lines of code, price per sq. foot	<b>2</b>	<b>CO1</b>
1.5	The overall project costs broken down into the various major heads like materials, labour, equipment etc. is known as _____.	<b>2</b>	<b>CO1</b>
1.6	A _____ is an agreement between two or more parties that is binding on all the parties.	<b>2</b>	<b>CO1</b>
1.7	The _____ is a structured log that maintains summary of all identified risks that can affect the project along with relevant information to manage the risk.	<b>2</b>	<b>CO1</b>
1.8	Project Risk is an uncertain event or condition that, if it occurs has a positive or negative effect on projects _____.	<b>2</b>	<b>CO1</b>
1.9	_____ integrates cost, schedule and scope and used to forecast future performance and project completion dates.	<b>2</b>	<b>CO1</b>
1.10	The _____ is a thorough examination of the management of project, its methodology and procedures, its records, its budgets and expenditures and degree of completion.	<b>2</b>	<b>CO1</b>

**SECTION B**

**4Qx5M= 20 Marks**

2.1	Greenfield project vs. Brownfield project	<b>5</b>	<b>CO2</b>
2.2	Product scope vs. Project scope	<b>5</b>	<b>CO2</b>

2.3	CPM vs. PERT	5	CO2																																																										
2.4	Fixed Price contracts vs. Cost Reimbursable contracts	5	CO2																																																										
<b>SECTION-C</b> <b>3Qx10M= 30 Marks</b>																																																													
3.1	Explain the various stages of project life cycle with the help of a labelled diagram.	10	CO3																																																										
3.2	Discuss the problems caused by project cost over estimation & under estimation.	10	CO3																																																										
3.3	How can knowledge of project management contribute to the economic development of a country? Giving brief scenario of project status in various sectors throw light on the major causes of project failure in India.	10	CO3																																																										
<b>SECTION-D</b> <b>2Qx15M = 30 Marks</b>																																																													
4.1	<p>The cash flows of two competing projects are tabulated below. Determine the payback period and NPV of the following projects and compare them according to each criterion. The cost of capital is 12% per annum. (All figures in in Rs. Crores)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Project</th> <th>Initial Investment</th> <th>Year 1</th> <th>Year 2</th> <th>Year 3</th> <th>Year 4</th> <th>Year 5</th> </tr> </thead> <tbody> <tr> <td><b>Alpha</b></td> <td>100</td> <td>40</td> <td>30</td> <td>30</td> <td>30</td> <td>30</td> </tr> <tr> <td><b>Beta</b></td> <td>100</td> <td>50</td> <td>50</td> <td>20</td> <td>15</td> <td>10</td> </tr> </tbody> </table>	Project	Initial Investment	Year 1	Year 2	Year 3	Year 4	Year 5	<b>Alpha</b>	100	40	30	30	30	30	<b>Beta</b>	100	50	50	20	15	10	15	CO4																																					
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4.2	<p>Consider the data of a project shown in the following table.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Activity</th> <th rowspan="2">Immediate predecessor(s)</th> <th colspan="2">Time (days)</th> <th colspan="2">Cost (Rs. '000)</th> </tr> <tr> <th>Normal</th> <th>Crash</th> <th>Normal</th> <th>Crash</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>-</td> <td>6</td> <td>4</td> <td>60</td> <td>78</td> </tr> <tr> <td>B</td> <td>-</td> <td>7</td> <td>4</td> <td>30</td> <td>42</td> </tr> <tr> <td>C</td> <td>A</td> <td>4</td> <td>1</td> <td>50</td> <td>92</td> </tr> <tr> <td>D</td> <td>A</td> <td>6</td> <td>5</td> <td>60</td> <td>75</td> </tr> <tr> <td>E</td> <td>B,C</td> <td>7</td> <td>3</td> <td>20</td> <td>68</td> </tr> <tr> <td>F</td> <td>E</td> <td>3</td> <td>1</td> <td>20</td> <td>40</td> </tr> <tr> <td>G</td> <td>E</td> <td>7</td> <td>3</td> <td>40</td> <td>56</td> </tr> <tr> <td>H</td> <td>D,F</td> <td>5</td> <td>4</td> <td>30</td> <td>41</td> </tr> </tbody> </table> <p>If the indirect cost per day is Rs. 15,000, find the optimal crashed project completion time.</p>	Activity	Immediate predecessor(s)	Time (days)		Cost (Rs. '000)		Normal	Crash	Normal	Crash	A	-	6	4	60	78	B	-	7	4	30	42	C	A	4	1	50	92	D	A	6	5	60	75	E	B,C	7	3	20	68	F	E	3	1	20	40	G	E	7	3	40	56	H	D,F	5	4	30	41	15	CO4
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