



Name:

Enrolment No:

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2024

Course: Project Management

Program: BBA (Logistics Management)

Course Code: LSCM 2018

Instructions: Usage of calculator and graph paper allowed.

Semester: V

Time: 03 Hrs.

Max. Marks: 100

SECTION A
10Qx2M=20Marks

S. No.		Marks	CO
Q 1	(1.1-1.5) Define terms in one or two lines. (1.9-1.10) Give the full form.		
1.1	Project Life Span	2	CO1
1.2	Authority	2	CO1
1.3	Network	2	CO1
1.4	Payback period	2	CO1
1.5	Force Majeure	2	CO1
1.6	PMBOK	2	CO1
1.7	EIA	2	CO1
1.8	WACC	2	CO1
1.9	WBS	2	CO1
1.10	EPC Project	2	CO1

SECTION B
4Qx5M= 20 Marks

2.1	Project Charter vs. Project Manual	5	CO2
2.2	Discounted vs. Non-Discounted Cash Flow Techniques of Project Appraisal	5	CO2
2.3	Financial Cost vs. Economic Cost	5	CO2
2.4	CPM vs. PERT	5	CO2

SECTION-C
3Qx10M=30 Marks

3.1	The initial investment in a project is Rs. 1 Crore and projected to generate cash flows of Rs. 10 Lakhs, Rs. 20 Lakhs, Rs. 30 Lakhs, Rs. 40 Lakhs & Rs. 50 Lakhs at the end of each year for next 5 years. If the cost of capital is 10%, should the project be accepted?	10	CO3
3.2	Explain the working and suitability of a Matrix organization for executing projects.	10	CO3
3.3	How can transportation and infrastructure projects improve the logistics & supply chain efficiency? Explain with contemporary projects ongoing in India.	10	CO3

SECTION-D
2Qx15M= 30 Marks

4.1	<p>A project consists of 12 activities whose precedence relationships and their time estimates are shown as follows:</p> <table border="1"> <thead> <tr> <th>ACTIVITY</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> <th>H</th> <th>I</th> <th>J</th> <th>K</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>Immediate Predecessor(s)</td> <td>-</td> <td>-</td> <td>-</td> <td>A</td> <td>A</td> <td>B,E</td> <td>C</td> <td>C</td> <td>D</td> <td>F,G</td> <td>H</td> <td>K</td> </tr> <tr> <td rowspan="3">Time Estimates</td> <td>Optimistic (a)</td> <td>4</td> <td>2</td> <td>5</td> <td>8</td> <td>4</td> <td>5</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>2</td> <td>4</td> </tr> <tr> <td>Most likely (m)</td> <td>6</td> <td>3</td> <td>5</td> <td>10</td> <td>5</td> <td>6</td> <td>8</td> <td>8</td> <td>7</td> <td>10</td> <td>3</td> <td>5</td> </tr> <tr> <td>Pessimistic (b)</td> <td>8</td> <td>4</td> <td>5</td> <td>12</td> <td>6</td> <td>7</td> <td>11</td> <td>10</td> <td>13</td> <td>12</td> <td>4</td> <td>6</td> </tr> </tbody> </table> <p>a) Find the duration and variance of each activity. b) Draw the project network. c) Find the critical path & corresponding expected project completion time.</p>	ACTIVITY	A	B	C	D	E	F	G	H	I	J	K	L	Immediate Predecessor(s)	-	-	-	A	A	B,E	C	C	D	F,G	H	K	Time Estimates	Optimistic (a)	4	2	5	8	4	5	5	6	7	8	2	4	Most likely (m)	6	3	5	10	5	6	8	8	7	10	3	5	Pessimistic (b)	8	4	5	12	6	7	11	10	13	12	4	6	15	CO4
ACTIVITY	A	B	C	D	E	F	G	H	I	J	K	L																																																									
Immediate Predecessor(s)	-	-	-	A	A	B,E	C	C	D	F,G	H	K																																																									
Time Estimates	Optimistic (a)	4	2	5	8	4	5	5	6	7	8	2	4																																																								
	Most likely (m)	6	3	5	10	5	6	8	8	7	10	3	5																																																								
	Pessimistic (b)	8	4	5	12	6	7	11	10	13	12	4	6																																																								
4.2	<p>A project consists of following 8 activities, whose precedence relationships and time estimates are:</p> <table border="1"> <thead> <tr> <th>Activity</th> <th>Immediate Predecessors</th> <th>Duration (in Weeks)</th> <th>Budget Cost of activity (Rs. Lakhs)</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>-</td> <td>8</td> <td>8</td> </tr> <tr> <td>B</td> <td>-</td> <td>2</td> <td>8</td> </tr> <tr> <td>C</td> <td>B</td> <td>5</td> <td>10</td> </tr> <tr> <td>D</td> <td>C</td> <td>6</td> <td>9</td> </tr> <tr> <td>E</td> <td>A</td> <td>4</td> <td>12</td> </tr> <tr> <td>F</td> <td>D,E</td> <td>4</td> <td>6</td> </tr> <tr> <td>G</td> <td>D,E</td> <td>1</td> <td>1</td> </tr> <tr> <td>H</td> <td>F</td> <td>3</td> <td>6</td> </tr> <tr> <td>Project</td> <td></td> <td></td> <td>60</td> </tr> </tbody> </table> <p>1 Draw the network diagram and find critical path. 2 Draw the Gantt chart showing cost break-up. 3 Prepare the cost baseline.</p>	Activity	Immediate Predecessors	Duration (in Weeks)	Budget Cost of activity (Rs. Lakhs)	A	-	8	8	B	-	2	8	C	B	5	10	D	C	6	9	E	A	4	12	F	D,E	4	6	G	D,E	1	1	H	F	3	6	Project			60	15	CO4																										
Activity	Immediate Predecessors	Duration (in Weeks)	Budget Cost of activity (Rs. Lakhs)																																																																		
A	-	8	8																																																																		
B	-	2	8																																																																		
C	B	5	10																																																																		
D	C	6	9																																																																		
E	A	4	12																																																																		
F	D,E	4	6																																																																		
G	D,E	1	1																																																																		
H	F	3	6																																																																		
Project			60																																																																		