

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

Online End Semester Examination, December 2020

Course : Project Management & Contract Administration

Semester: I

Programme : MBA (GM/AVM)

Time: 03 hrs.

Course Code: LSCM 8001

Max. Marks: 100

Instructions: All questions are compulsory

SECTION A (30 Marks)

1. Each Question will carry 5 Marks

2. Answer the following questions pointwise strictly.

S. No.		Marks	CO
Q 1	Phases of Project Life Cycle are:	5	CO 1
Q 2	Name 5 Project Management Process Groups (according to PMI)	5	CO 1
Q 3	Mention any 5 Project Management Knowledge Areas (according to PMI)	5	CO 1
Q 4	Categories of competencies required for a project manager (according to IPMA)	5	CO 1
Q 5	Which are the factors considered in non-financial evaluation for business case analysis of a project?	5	CO 1
Q 6	What are the three dimensions of a project risk factor?	5	CO 1

SECTION B (50 Marks)

1. Each question will carry 10 marks

2. Instruction: Answer precisely, write legibly and stepwise.

Q 7	Consider the data of a project shown in the following table.	10	CO2																																
	<table border="1"><thead><tr><th>Activity</th><th>Immediate Predecessor(s)</th><th>Time (weeks)</th><th>Cost (Rs.)</th></tr></thead><tbody><tr><td>A</td><td>-</td><td>8</td><td>4000</td></tr><tr><td>B</td><td>-</td><td>5</td><td>3000</td></tr><tr><td>C</td><td>-</td><td>10</td><td>6000</td></tr><tr><td>D</td><td>A</td><td>6</td><td>4000</td></tr><tr><td>E</td><td>C</td><td>7</td><td>5000</td></tr><tr><td>F</td><td>D</td><td>9</td><td>7000</td></tr><tr><td>G</td><td>B,E</td><td>3</td><td>2000</td></tr></tbody></table>			Activity	Immediate Predecessor(s)	Time (weeks)	Cost (Rs.)	A	-	8	4000	B	-	5	3000	C	-	10	6000	D	A	6	4000	E	C	7	5000	F	D	9	7000	G	B,E	3	2000
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	Given that indirect cost per week is Rs. 350.																																		
	Find the total project cost if the project has to be completed in minimum possible time.																																		

Q 8	<p>Draw the network diagram.</p> <table border="1" data-bbox="204 226 1029 680"> <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>Find the critical path and minimum time required to complete the project.</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	10	CO2
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F	D,E	4	6																																								
G	D,E	1	1																																								
H	F	3	6																																								
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Q 9	Draw the Gantt chart (showing cost break-up) and project cost baseline for the above project.	10	CO2																																								
Q 10	<p>The project progress data of the project in the previous question is given below:</p> <table border="1" data-bbox="204 926 651 1247"> <thead> <tr> <th colspan="3">End of Week 10</th> </tr> <tr> <th>Activity</th> <th>% Work Completed</th> <th>Actual cost</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>100</td> <td>10</td> </tr> <tr> <td>B</td> <td>100</td> <td>10</td> </tr> <tr> <td>C</td> <td>100</td> <td>12</td> </tr> <tr> <td>D</td> <td>20</td> <td>2</td> </tr> <tr> <td>Others</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p>Calculate the EV, AC, CV, CPI, SP, SPI at the end of week 10. Estimate project completion cost & time on the basis of performance at week 10.</p>	End of Week 10			Activity	% Work Completed	Actual cost	A	100	10	B	100	10	C	100	12	D	20	2	Others	0	0	10	CO3																			
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Q 11	Compare & contrast different types of contract.	10	CO3																																								
SECTION-C (20 marks)																																											
1. Read the following caselet carefully.																																											
2. Instruction: Solve systematically showing sample calculations and write legibly.																																											
Q 12	<p>ABC Co. is thinking to purchase a car for official work @ Rs. 10 Lakhs. (Including all costs of acquiring). This owned car will also incur a maintenance cost of Rs. 40,000 per annum. The current practice is hiring car @ Rs. 2,00,000 per annum (including maintenance cost). The fuel cost and driver salary will remain unchanged in the both arrangements. The life of the car is 8 years and its salvage at the end of life estimated to be Rs. 1,00,000. Assume all recurring costs are fix for this period and cost of capital is 10%. What should the company do?</p>	20	CO 4																																								