

Name:	
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2022

Course: Project Management & Contract Administration	Semester: IV
Program: MBA (FM/HRM/MKTG/OPM)	Time: 03 Hours
Course code: LSCM 8001	Max. Marks: 100
Instructions: Use of calculator is allowed	

SECTION A

Q 1	Answer in brief, precise and pointwise.	Marks	CO
	a) Project	2	CO1
	b) Triple Constraints of Project Management	2	
	c) PMBOK	2	
	d) Network	2	
	e) PERT	2	
	f) Three dimensions of Risk	2	
	g) IRR	2	
	h) Project Procurement	2	
	i) WBS	2	
	j) Types of Cost reserves	2	

SECTION B (Write short notes)

Q 2 (a)	Project Sponsor	5	CO2
Q 2 (b)	PM Process Groups	5	CO2
Q 2 (c)	Types of Contract	5	CO2
Q 2 (d)	PM in Digital Era	5	CO2

SECTION-C

Q 3 (a)	Identify the specific outcomes of different stages of project life cycle and comment on the changes in various characteristics during project life cycle.	10	CO3			
Q 3 (b)	Discuss the major causes of project failures and delay in India with special reference to public sector projects.	10	CO3			
Q 3 (c)	A project consists of 12 activities whose precedence relationships and their time estimates are shown as follows:	10	CO3			
	<table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;">ACTIVITY</td> <td style="padding: 5px;">Immediate</td> <td style="padding: 5px;">Time Estimates (Weeks)</td> </tr> </table>	ACTIVITY	Immediate	Time Estimates (Weeks)		
ACTIVITY	Immediate	Time Estimates (Weeks)				

	Predecessor(s)	Optimistic (a)	Most Likely (m)	Pessimistic (b)
A	-	4	6	8
B	-	2	3	4
C	-	5	5	5
D	A	8	10	12
E	A	4	5	6
F	B,E	5	6	7
G	C	5	8	11
H	C	6	8	10
I	D	7	7	13
J	F,G	8	10	12
K	H	2	3	4
L	K	4	5	6

(i) Find the duration and variance of each activity.
(ii) Draw the project network.
(iii) Find the critical path & corresponding expected project completion time.

SECTION-D

Q 4 (a)	Consider the data of a project shown in the following table.	15	CO4																																																				
	<table border="1"> <thead> <tr> <th rowspan="2"><i>Activity</i></th> <th rowspan="2"><i>Immediate predecessor(s)</i></th> <th colspan="2"><i>Time (weeks)</i></th> <th colspan="2"><i>Cost (Rs.)</i></th> </tr> <tr> <th><i>Normal</i></th> <th><i>Crash</i></th> <th><i>Normal</i></th> <th><i>Crash</i></th> </tr> </thead> <tbody> <tr> <td>A</td> <td>-</td> <td>8</td> <td>6</td> <td>4000</td> <td>4300</td> </tr> <tr> <td>B</td> <td>-</td> <td>5</td> <td>4</td> <td>3000</td> <td>3150</td> </tr> <tr> <td>C</td> <td>-</td> <td>10</td> <td>8</td> <td>6000</td> <td>6800</td> </tr> <tr> <td>D</td> <td>A</td> <td>6</td> <td>5</td> <td>4000</td> <td>4200</td> </tr> <tr> <td>E</td> <td>C</td> <td>7</td> <td>7</td> <td>5000</td> <td>-</td> </tr> <tr> <td>F</td> <td>D</td> <td>9</td> <td>7</td> <td>7000</td> <td>7550</td> </tr> <tr> <td>G</td> <td>B,E</td> <td>3</td> <td>2</td> <td>2000</td> <td>2100</td> </tr> </tbody> </table>			<i>Activity</i>	<i>Immediate predecessor(s)</i>	<i>Time (weeks)</i>		<i>Cost (Rs.)</i>		<i>Normal</i>	<i>Crash</i>	<i>Normal</i>	<i>Crash</i>	A	-	8	6	4000	4300	B	-	5	4	3000	3150	C	-	10	8	6000	6800	D	A	6	5	4000	4200	E	C	7	7	5000	-	F	D	9	7	7000	7550	G	B,E	3	2	2000	2100
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	If the indirect cost per week is Rs. 350, then prepare the project plan if it is a purely business project solely guided by cost constraint.																																																						
Q 4 (b)	What will be your plan if it is an emergency with only objective to reduce the project duration?	15	CO4																																																				