



**UNIVERSITY OF PETROLEUM AND ENERGY
STUDIES**

End Semester Examination, December 2021

Course: Project Management and Contract Administration
Program: MBA (Oil and Gas)
Course Code: LSCM 8001

Semester : 3
Duration : 03 hrs.
Max. Marks: 100

Instructions:

Q. No	Section A (Type the answers in test box)		CO
Q1	Probability of a project being completed within its expected time of completion is a. 1.0 b. 0 c. 0.5 d. Cannot say	2 marks	CO1
Q2	Crash cost is a. Equal to normal cost b. Greater than normal cost c. Less than normal cost d. Cannot say	2 marks	CO1
Q3	If an activity has been crashed for time, it is expected that for this activity a. CPI will be > 1 and SPI will be > 1 b. CPI will be < 1 and SPI will be > 1 c. CPI will be > 1 and SPI will be < 1 d. CPI will be < 1 and SPI will be < 1	2 marks	CO1
Q4	CPI < 1.00 indicates a. Cost overrun b. Schedule over run c. Cost under run	2 marks	CO1

	d. Schedule under run		
Q5	Amount of time by which an activity can be delayed maintaining late finish of preceding and early start of succeeding activity is called a. Free slack b. Independent slack c. Total slack d. None of above	2 marks	CO1
Q6	A risk response aimed at reducing impact of risk is called a. transferring b. Mitigating c. Avoiding d. Sharing	2 marks	CO1
Q7	Identifying the amount of individual resources an existing schedule required during specific time periods is called a. Resource levelling b. Resource scheduling c. Resource loading d. None of above	2 marks	CO1
Q8	Estimation of overall project cost and cost of major components by senior managers is an activity involved in a. Top Down Budgeting b. Bottom up budgeting c. Work element costing d. All of above	2 marks	CO1
Q9	Select the option with correct sequence of stages in project life cycle a. Planning-selection-scheduling-evaluation-monitoring and control-termination b. Selection-planning-scheduling-evaluation-monitoring and control-termination c. Planning-selection-scheduling-monitoring and control-evaluation-termination d. Selection-planning-scheduling-monitoring and control-evaluation-termination	2 marks	CO1

Q10	In order to complete a critical activity before time, a project manager crashes the activity by using additional resources. It will have an impact on a. CPI of project b. SPI of project c. Both CPI and SPI of project d. None of SPI and CPI	2 marks	CO1
Section B Attempt all questions (Scan and upload)			
Q11	A project was reviewed during its execution. It was observed that 40% of work scheduled was completed against a target of 65% on that day. The cost of project was Rs.200000/- and was distributed over the project span uniformly. A total of Rs.110000/- was already spent on the project. Calculate cost variance, schedule variance, CPI and SPI and comment on the project performance	5 Marks	CO2
Q12	Explain the stages involved in a project Audit cycle. What is the structure of an audit report?	5 Marks	CO1
Q13	What are the performance objectives of a project? Discuss the tradeoff between project objectives.	5 Marks	CO2
Q14	Write short notes on following a. Bottom up budgeting b. Risk severity matrix	5 Marks	CO2
Section C Attempt all questions (Scan and upload)			
Q15	Differentiate between Total slack, free slack and independent slack. What is the significance of activity slack in resource scheduling for projects?	10 Marks	CO2

Q16

The following represent activities in a project.

10 Marks

Activity	A	B	C	D	E	F
Immediate Predecessors	-	-	A	A, B	C	E, D
Expected Time (Weeks)	12	15	10	6	13	12
Standard deviation	2	1	2	1.5	1	0

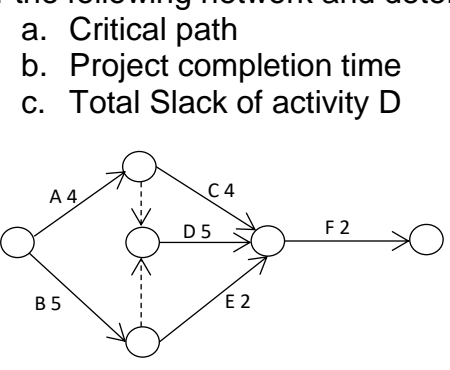
Develop the network diagram for the project.
 Determine the standard deviation of the completion time of the project

CO2

17

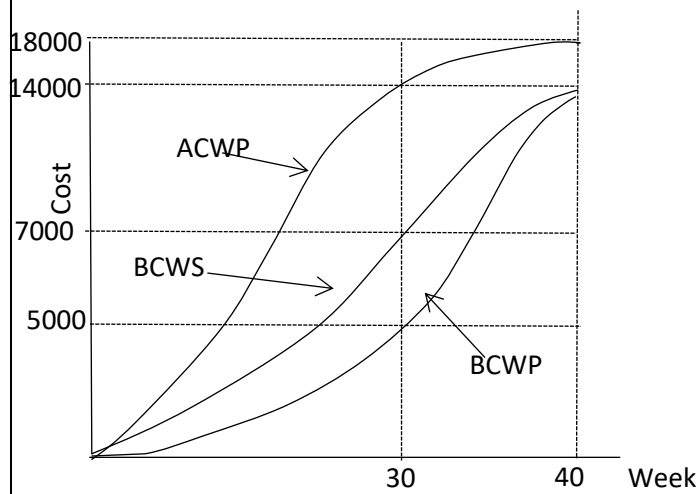
Consider the following network and determine the

10 Marks



OR

CO3



Analyze the curve and determine

- Schedule slip
- Cost variance at week 30
- SPI at week 30
- CPI at project finish

CO3

Section D
Attempt all questions
(Scan and upload)

Q18 Given the following information, determine the expected time of project completion. What is the probability of project being completed at its expected time?

Activity	Optimistic time	Most likely time	Pessimistic time	Predecessor activities
A	12	13	14	-
B	11	12	13	A
C	14	15	22	A
D	11	13	15	B, C
E	11	12	13	D

15 Marks

CO3

Q19

The expected investment and revenue from a project is given below. The life of project is estimated as 10 years.

Year	Initial investment	1	2	3	4	5	6	7	8	9	10
Investment	20000			20000			50000		40000		
Revenue		12000			55000	50000			50000		20000

Calculate the net present value of the project. Should the management take up this project? The rate of interest is 10%

OR

Define the terms risk and risk management in projects. Explain FMEA and risk severity matrix as tools for risk assessment.

15 Marks

CO3