

Roll No: -----

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End- Semester Examination – May 2019

Program/course: BBA (OG, F&A, & HR)

Semester – VI

Subject: Project Management

Max. Marks : 100

Code : BBCG-108

Duration : 3 Hrs.

No. of page/s: 2

Section A (2*10=20 marks)			
S. No.	Explain the following terms in two to three lines. Each carry 2 marks	Marks	CO
1.1	Project	2	CO 1
1.2	Project Crashing	2	CO 3
1.3	NPV	2	CO 3
1.4	WACC	2	CO 3
1.5	EIA	2	CO 2
1.6	Responsibility	2	CO 4
1.7	Accountability	2	CO 4
1.8	Authority	2	CO 4
1.9	EVM	2	CO 2
1.10	Cost Baseline	2	CO 3
SECTION B: Write short notes on any four of the following. Each carries 5 marks. (5*4=20 marks)			
2.1	Market/Commercial Feasibility of Project	5	CO 1
2.2	Social Cost Benefit Analysis	5	CO 2
2.3	Totally Projectized Organization	5	CO 4
2.4	Cost Engineering	5	CO 3
2.5	CPM vs. PERT	5	CO 3
SECTION-C: Answer any two of the following questions. Each carries 15 marks. (15*2=30 marks)			
3.1	Explain various phases of project life cycle with the help of a neat and labelled diagram.	15	CO 1

3.2	What is a contract? What are its essential features? How contracts are classified and applied in managing projects	15	CO 5												
3.3	<p>A project requires an initial capital investment of Rs. 2,00,00,000. The capital requirement is met through a financial institution which charges 11% annual interest rate.</p> <p>The projected annual cash inflows during the project life:</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>Year</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Cash Inflow</td> <td>30,00,000</td> <td>50,00,000</td> <td>80,00,000</td> <td>50,00,000</td> <td>25,00,000</td> </tr> </table> <p>There is an available opportunity of using intermediate cash inflows into another project which has an IRR of 15%. The salvage value at the end of project life is Rs. 25,00,000; which will be available at the end of sixth year only.</p> <p>Calculate the Modified NPV (MNPV) for the project. Hence, comment on the financial feasibility of the project.</p>	Year	1	2	3	4	5	Cash Inflow	30,00,000	50,00,000	80,00,000	50,00,000	25,00,000	15	CO 2
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SECTION-D: (30 marks)

4.0	<p>Sharon Lowe, vice president for marketing for the Electronic Toys Company, is about to begin a project to design an advertising campaign for a new line of toys. She wants the project completed within 55 days in time to launch the advertising campaign at the beginning of the Christmas season. Sharon has identified the six activities (labeled A, B, . . . , F) needed to execute this project. The table below gives the precedence rule of each activity and the PERT three-time estimates. Find the probability of completing the project in 55 days.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Activity</th> <th>Preceding Activity</th> <th>Optimistic Time Estimate</th> <th>Most Likely Time Estimate</th> <th>Pessimistic Time Estimate</th> <th>Activity</th> <th>Preceding Activity</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>----</td> <td>11 days</td> <td>12 days</td> <td>13 days</td> <td>A</td> <td>----</td> </tr> <tr> <td>B</td> <td>-----</td> <td>15 days</td> <td>21 days</td> <td>39 days</td> <td>B</td> <td>-----</td> </tr> <tr> <td>C</td> <td>A</td> <td>12 days</td> <td>15 days</td> <td>18 days</td> <td>C</td> <td>A</td> </tr> <tr> <td>D</td> <td>B</td> <td>18 days</td> <td>27 days</td> <td>36 days</td> <td>D</td> <td>B</td> </tr> <tr> <td>E</td> <td>C</td> <td>12 days</td> <td>18 days</td> <td>24 days</td> <td>E</td> <td>C</td> </tr> <tr> <td>F</td> <td>E</td> <td>2 days</td> <td>5 days</td> <td>14 days</td> <td>F</td> <td>E</td> </tr> </tbody> </table>	Activity	Preceding Activity	Optimistic Time Estimate	Most Likely Time Estimate	Pessimistic Time Estimate	Activity	Preceding Activity	A	----	11 days	12 days	13 days	A	----	B	-----	15 days	21 days	39 days	B	-----	C	A	12 days	15 days	18 days	C	A	D	B	18 days	27 days	36 days	D	B	E	C	12 days	18 days	24 days	E	C	F	E	2 days	5 days	14 days	F	E	30	CO 2 & CO 3
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SECTION A: (1*20=20 marks)

S. No.	Fill in the blanks. Each carry 1 mark.	Marks	CO
1.1	A project is a series of _____ directed to accomplishment of a desired objective.	1	CO 1
1.2	PMBOK stands for _____.	1	CO 1
1.3	The triple constraints of project management are time, _____ and scope.	1	CO 3
1.4	Full form of SCBA is _____.	1	CO 2
1.5	Acts of God, government actions, strikes, lock-outs or other concerted action of workmen, war sabotage, riots, civil commotion, police action, revolution, flood, fire, earthquake and epidemic are collectively termed as _____.	1	CO 5
1.6	NPV stands for _____.	1	CO 1
1.7	A _____ is a graphical model depicting the interrelationship between various activities of the project.	1	CO 3
1.8	Full form of PERT is _____.	1	CO 3
1.9	The slack time of critical activities in a project network is _____.	1	CO 3
1.10	EPC projects are _____.	1	CO 5
1.11	Both activities and their duration are _____ in CPM.	1	CO 3
1.12	Full form of UNIDO is _____.	1	CO 1
1.13	The time phased cumulative cost curve is _____ shaped.	1	CO 4
1.14	LSTK projects are _____.	1	CO 5
1.15	If cost of capital is same as internal rate of return, then Net Present Value of the project will be _____.	1	CO 1
1.16	WBS stands for _____.	1	CO 2
1.17	The most hectic phase in project life cycle is _____.	1	CO 2
1.18	Full form of RAT is _____.	1	CO 4

1.19	_____ is an enforceable agreement between two or more parties.	1	CO 5																														
1.20	EVMS stands for _____.	1	CO 4																														
SECTION B: Write short notes on any four of the following. Each carry 5 marks. (5*4=20 marks)																																	
2.1	Environmental Impact Assessment	5	CO 1																														
2.2	Types of Cost Estimates	5	CO 2																														
2.3	Cost Engineering	5	CO 3																														
2.4	S-Curve	5	CO 4																														
2.5	Essential Elements of a Contract	5	CO 5																														
SECTION-C: Answer any two of the following questions. Each carries 15 marks. (15*2=30 marks)																																	
3.1	What is the definition of project according to PMI? Explain its various features and characteristics. How projects can be classified and categorized on various bases?	15	CO 1																														
3.2	Explain the structure of matrix organization and task force organization with the help of an organizational structure. Also, discuss their suitability and limitations.	15	CO 2																														
3.3	<p>A project requires an initial capital investment of Rs. 2,00,00,000. The capital requirement is met through a financial institution which charges 11% annual interest rate.</p> <p>The projected annual cash inflows during the project life:</p> <table border="1" data-bbox="203 1012 1169 1150"> <thead> <tr> <th>Year</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> </tr> </thead> <tbody> <tr> <td>Cash Inflow</td> <td>30,00,000</td> <td>50,00,000</td> <td>80,00,000</td> <td>50,00,000</td> <td>25,00,000</td> </tr> </tbody> </table> <p>There is an available opportunity of using intermediate cash inflows into another project which has an IRR of 15%. The salvage value at the end of project life is Rs. 25,00,000; which will be available at the end of sixth year only.</p> <p>Calculate the Modified NPV (MNPV) for the project. Hence, comment on the financial feasibility of the project.</p>	Year	1	2	3	4	5	Cash Inflow	30,00,000	50,00,000	80,00,000	50,00,000	25,00,000	15	CO 2																		
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SECTION-D: Read the project details & answer the questions followed. Each carry 10 marks. (10*3=30 marks)																																	
4.0	<p>Mr. Kapoor plans to construct a house in Dehradun. The size of the house is 1000 sq. feet and will cost Rs. 3,000 per sq. foot. The activities in constructing the house, the precedence activity(s), the durations and the percentage of total cost are as follows:</p> <table border="1" data-bbox="203 1585 1295 1852"> <thead> <tr> <th>Activity</th> <th>Description</th> <th>Precedence</th> <th>Duration (Weeks)</th> <th>%age Of Total Cost</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Excavation and framing</td> <td>-</td> <td>4</td> <td>24</td> </tr> <tr> <td>B</td> <td>Roof and Fireplace</td> <td>A</td> <td>3</td> <td>8</td> </tr> <tr> <td>C</td> <td>Wiring roughed in</td> <td>A</td> <td>1</td> <td>3</td> </tr> <tr> <td>D</td> <td>Plumbing roughed in</td> <td>B,C</td> <td>2</td> <td>6</td> </tr> <tr> <td>E</td> <td>Siding on</td> <td>D</td> <td>2</td> <td>5</td> </tr> </tbody> </table>	Activity	Description	Precedence	Duration (Weeks)	%age Of Total Cost	A	Excavation and framing	-	4	24	B	Roof and Fireplace	A	3	8	C	Wiring roughed in	A	1	3	D	Plumbing roughed in	B,C	2	6	E	Siding on	D	2	5		CO 4 & CO 5
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	F	Windows, insulation, walls, plaster and garage	E	8	17		
	G	Furnace	B	1	9		
	H	Plumbing fixtures installed	D	2	4		
	J	Exterior paint, light fixtures, hardware installed	F,G,H	6	10		
	K	Floors laid and finished	H	4	6		
	L	Carpet and trim installed	K	1	4		
	M	Interior decoration	J,L	2	4		
	(i) Estimate the total project cost and draw the project network.					10	
	(ii) Plan the construction with a Gantt chart and project completion time.						
	(iii) Draw the time-phased cumulative cost curve for this project.						