Name: Enrolment No:	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2019

Course: Project Formulation, Appraisal and Management **Semester: 6**
Program: Bachelor in Planning **Time 03 hrs.**
Course Code: BPLC322 **Max. Marks: 100**
Nos. of page(s): 4
Instructions: Mobiles, Laptops, Tablets, Books & Notes are not allowed in exam room.

SECTION A

S. No.		Marks	CO
Q 1	Discuss the concepts of opportunity cost and shadow pricing while assessing the cost and expenditures for any project. Explain the both with location and resource cases. Support the answer with examples/sketches/graphs.	**4**	**CO1**
Q 2	Define the concept of probability index. Company A is undertaking a project at a cost of Rs 861 lakhs which is expected to generate future net cash flows with a present value of Rs 937 lakhs. Calculate if the project is viable or not? Support the answer with examples/sketches/graphs.	**4**	**CO1**
Q 3	Explain the resource leveling, allocation and implementation plan for any project during its development and execution. Support the answer with examples/sketches/graphs.	**4**	**CO2**
Q 4	Success of any project is depends on the successful implementation and operation of it. Discuss about the issues during development and implementation of any project. Support the answer with examples/sketches/graphs.	**4**	**CO2**
Q 5	Illustrate and explain the concepts of present value of money and future value of money during the preparation of financial model of any project. Support the answer with examples/sketches/graphs.	**4**	**CO1**

SECTION B

Q 1	Discuss and Elaborate the concept of Net Present Value (NPV) in project finance and appraisal with citing one example of any infrastructure project. Mention about the decision rule for it. Calculate the net present value of a project which requires an initial investment of Rs 65, 95,875.00 and it is expected to generate a cash inflow of Rs 6, 28,395.00 each month for 12 months. Assume that the salvage value of the	**10**	**CO2**

<table>
<tr><td></td><td>project is zero. The target rate of return is 12% per annum.</td><td></td><td></td></tr>
<tr><td>Q 2</td><td>Discuss and explain about the Technique of Network Analysis for a project during planning, development and implementation. Elaborate about the four principal stages of Network Analysis. A company decides to develop a project with a project life cycle start and finish points. Draw the Network of that particular project as the activities appended below:
<table>
<tr><th>Activity</th><th>Activity Time (Days)</th><th>Immediate Predecessor (s)</th></tr>
<tr><td>A</td><td>-</td><td>-</td></tr>
<tr><td>B</td><td>5</td><td>A</td></tr>
<tr><td>C</td><td>6, 7</td><td>B, D</td></tr>
<tr><td>D</td><td>3</td><td>A</td></tr>
<tr><td>E</td><td>4</td><td>A</td></tr>
<tr><td>F</td><td>6</td><td>E</td></tr>
<tr><td>G</td><td>5, 3</td><td>C, F</td></tr>
<tr><td>H</td><td>5</td><td>F</td></tr>
<tr><td>I</td><td>4, 6, 5</td><td>J, G, H</td></tr>
<tr><td>J</td><td>7</td><td>G</td></tr>
<tr><td>K</td><td>8</td><td>I</td></tr>
</table>
Note: Activity time & immediate predecessor are in respective manner</td><td>10</td><td>CO1</td></tr>
<tr><td>Q 3</td><td>Discuss the concept of Accounting Rate of Return (ARR) for any project. Discuss the importance of ARR in project finance while conducting a project development exercise. For a company, an initial investment of Rs 85, 35, 965.00 is expected to generate annual cash inflow of Rs 23, 89, 985.00 for 6 years. Depreciation is allowed on the straight line basis. It is estimated that the project will generate scrap value of Rs 3, 50, 500.00 at end of the 6th year. Calculate its accounting rate of return assuming that there are no other expenses on the project.</td><td>10</td><td>CO2</td></tr>
<tr><td>Q 4</td><td>What do you understand by SCBA? Discuss the relevance and importance of SCBA during the project development cycle. Explain the core differences between CBA and SCBA. Elaborate on the case of Metro Rail in any metro/mega cities in India with detailed analysis of SCBA including major components. Support the answer with examples/sketches/graphs.
OR
Illustrate and discuss about the Project Crashing, Crash Time and Crash Cost during the cost consideration and time-cost trade off in any project implementation. Explain the relationship or interdependency of all the above components. Support the answer with examples/sketches/graphs.</td><td>10</td><td>CO1</td></tr>
<tr><td colspan="4">SECTION-C</td></tr>
<tr><td>Q 1</td><td>“Monitoring and Evaluation are very critical processes for analysis and assessment of any infrastructure project. At the global level, they are tools for identifying and</td><td>20</td><td>CO2</td></tr>
</table>

	documenting successful programmes and approaches and tracking progress toward common indicators across related projects with respect to the field. At the programme level, the purpose of monitoring and evaluation is to track implementation and outputs systematically, and measure the effectiveness of programmes. It helps determine exactly when a programme is on track and when changes may be needed. Monitoring and evaluation forms the basis for modification of interventions and assessing the quality of activities being conducted." Discuss, review and do the critical appraisal of the above statement. Illustrate the need, methods, techniques/tools of Monitoring and Evaluation of a project. Support your answer with examples, graphs/sketches/charts. Citing cases/examples would be appreciated.		
Q 2	"A feasibility study is prepared to determine the viability of an idea, such as ensuring a project is legally and technically feasible as well as economically justifiable. It tells us whether a project is worth the investment or not. But a DPR (Detailed Project Report) is the detailed report for the formulation of the investment proposal, which includes detailed assessment and analysis of each component at micro level. Investment decisions are taken based on the details incorporated in both the studies." Discuss, review and do the critical appraisal of the above statement. Elaborate on the need and requirement of a Feasibility Study and DPR for development of a project. Support your answer with examples, graphs/sketches/charts. Citing cases/examples would be appreciated. OR "Cost control and Cost Reduction, both, play an important role in identification of cost elements, their demarcation, ways for regulation of funds, monitoring of expenses, standards, performances, eliminating unnecessary expenditures, profitability, competitiveness and optimization of overall project development, execution, operation and monitoring." Discuss, review and do the critical appraisal of the above statement. Illustrate the need of both, features and various techniques/tools/methods of conducting the both during a project development. Support your answer with examples, graphs/sketches/charts. Citing cases/examples would be appreciated.	**20**	**CO2**

Name: Enrolment No:	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2019

Course: Project Formulation, Appraisal and Management **Semester: 6**
Program: Bachelor in Planning **Time 03 hrs.**
Course Code: BPLC322 **Max. Marks: 100**
Nos. of page(s): 4
Instructions: Mobiles, Laptops, Tablets, Books & Notes are not allowed in exam room.

SECTION A

S. No.		Marks	CO
Q 1	Success of any project is depends on the successful implementation and operation of it. Discuss about the issues during development and implementation of any project. Support the answer with examples/sketches/graphs.	**4**	**CO2**
Q 2	Discuss about the Gantt charts, Critical Path Method of network analysis and financing institutions as part of project development. Support the answer with examples/sketches/graphs.	**4**	**CO1**
Q 3	Explain about the technical and financial analysis of projects during the appraisal and assessment. List the components of same. Support the answer with examples/sketches/graphs.	**4**	**CO1**
Q 4	Define the concept of probability index. Company A is undertaking a project at a cost of Rs 861 lakhs which is expected to generate future net cash flows with a present value of Rs 937 lakhs. Calculate if the project is viable or not? Support the answer with examples/sketches/graphs.	**4**	**CO2**
Q 5	Illustrate and discuss about the Project Crashing, Crash Time and Crash Cost during the cost consideration and time-cost trade off in any project implementation. Explain the relationship or interdependency of all the above components. Support the answer with examples/sketches/graphs.	**4**	**CO2**

SECTION B

Q 1	Define the various components for cost of any project such as land and site development, Building and civil works, Plant and machinery, Technical know-how and engineering fees/consultancy fees, Expenses on foreign technicians and training of Indian technicians abroad etc. Support the answer with examples/sketches/graphs.	**10**	**CO1**
Q 2	Discuss and Elaborate the concept of Net Present Value (NPV) in project finance and appraisal with citing one example of any infrastructure project. Mention about the decision rule for it. Calculate the net present value of a project which requires an initial investment of Rs 65, 95,875.00 and it is expected to generate a cash inflow of	**10**	**CO2**

<table>
<tr><td></td><td>Rs 6, 28,395.00 each month for 12 months. Assume that the salvage value of the project is zero. The target rate of return is 12% per annum.</td><td></td><td></td></tr>
<tr><td>Q 3</td><td>Discuss and explain about the Technique of Network Analysis for a project during planning, development and implementation. Elaborate about the four principal stages of Network Analysis. A company decides to develop a project with a project life cycle start and finish points. Draw the Network of that particular project as the activities appended below:
<table>
<tr><th>Activity</th><th>Activity Time (Days)</th><th>Immediate Predecessor (s)</th></tr>
<tr><td>A</td><td>-</td><td>-</td></tr>
<tr><td>B</td><td>5</td><td>A</td></tr>
<tr><td>C</td><td>6, 7</td><td>B, D</td></tr>
<tr><td>D</td><td>3</td><td>A</td></tr>
<tr><td>E</td><td>4</td><td>A</td></tr>
<tr><td>F</td><td>6</td><td>E</td></tr>
<tr><td>G</td><td>5, 3</td><td>C, F</td></tr>
<tr><td>H</td><td>5</td><td>F</td></tr>
<tr><td>I</td><td>4, 6, 5</td><td>J, G, H</td></tr>
<tr><td>J</td><td>7</td><td>G</td></tr>
<tr><td>K</td><td>8</td><td>I</td></tr>
</table>
Note: Activity time & immediate predecessor are in respective manner</td><td>10</td><td>CO1</td></tr>
<tr><td>Q 4</td><td>Discuss the concepts of opportunity cost, shadow pricing while assessing the cost and expenditures for any project. Explain the both with location and resource cases. Also Illustrate and explain the concepts of present value of money and future value of money during the preparation of financial model of any project. Support the answer with examples/sketches/graphs.
OR
What do you understand by SCBA? Discuss the relevance and importance of SCBA during the project development cycle. Explain the core differences between CBA and SCBA. Elaborate on the case of Metro Rail in any metro/mega cities in India with detailed analysis of SCBA including major components. Support the answer with examples/sketches/graphs.</td><td>10</td><td>CO1</td></tr>
<tr><td colspan="4">SECTION-C</td></tr>
<tr><td>Q 1</td><td>“Project formulation, development, appraisal, planning and analysis is an integrated component of any project implementation or commencement. It has to be done very carefully and critically. Apart from the other core components, analysis such as marketing, technical, finance, economic, social and environmental are the integral part of this exercise.” Discuss, Review and Comment on the given statement. Define and elaborate the need of the project appraisal and analysis. Explain the behavior of the project during the analysis. Derive the framework for any project appraisal and analysis. Discuss two cases from any urban infrastructure sector. Support your answer with examples, graphs/sketches/charts. Citing cases would be appreciated.</td><td>20</td><td>CO1</td></tr>
</table>

Q 2	"Monitoring and Evaluation are very critical processes for analysis and assessment of any infrastructure project. At the global level, they are tools for identifying and documenting successful programmes and approaches and tracking progress toward common indicators across related projects with respect to the field. At the programme level, the purpose of monitoring and evaluation is to track implementation and outputs systematically, and measure the effectiveness of programmes. It helps determine exactly when a programme is on track and when changes may be needed. Monitoring and evaluation forms the basis for modification of interventions and assessing the quality of activities being conducted." Discuss, review and do the critical appraisal of the above statement. Illustrate the need, methods, techniques/tools of Monitoring and Evaluation of a project. Support your answer with examples, graphs/sketches/charts. Citing cases/examples would be appreciated. OR "Cost control and Cost Reduction, both, play an important role in identification of cost elements, their demarcation, ways for regulation of funds, monitoring of expenses, standards, performances, eliminating unnecessary expenditures, profitability, competitiveness and optimization of overall project development, execution, operation and monitoring." Discuss, review and do the critical appraisal of the above statement. Illustrate the need of both, features and various techniques/tools/methods of conducting the both during a project development. Support your answer with examples, graphs/sketches/charts. Citing cases/examples would be appreciated.	**20**	**CO2**