Name: **Enrolment No:**	UPES UNIVERSITY OF TOMORROW

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

Course: Project Management **Semester: VI**

Program: B. Com. (BM&I), B. Com. (HONS), B.COM (TAX.), BBA (ABD), BBA (CORE-HRM), BBA (CORE-MKTG), BBA (CORE-OM), BBA (DM), BBA (FAS), BBA (FBE), BB **Time: 03 Hrs.**

Course Code: LSCM 3001 **Max. Marks: 100**

Instructions: Usage of calculator and graph paper allowed.

SECTION A
10Qx2M=20Marks

S. No.		Marks	CO
Q 1	Fill in the blanks, each carries 2 marks.		
1.1	A project is a series of _____ directed to accomplishment of a desired objective.	**2**	**CO1**
1.2	PMI stands for _____.	**2**	**CO1**
1.3	The most hectic phase of the project life cycle is _____.	**2**	**CO1**
1.4	The network analysis method that allows activity times to vary is _____.	**2**	**CO1**
1.5	_____ is the amount of time an individual activity in a network can be delayed without delaying the entire project.	**2**	**CO1**
1.6	_____ lists the activities on the vertical axis and time intervals on the horizontal axis.	**2**	**CO1**
1.7	A project organization that becomes permanent is referred as _____.	**2**	**CO1**
1.8	The triple constraints of project management are - Time, _____ and Scope.	**2**	**CO1**
1.9	_____defines the project scope, the project goals, name the project manager, his directing authority and request co-operation of all concerned in execution of the project.	**2**	**CO1**
1.10	The shape of time versus cumulative cost curve is _____.	**2**	**CO1**
SECTION B 4Qx5M= 20 Marks			
2.1	Distinguish between CPM and PERT.	5	CO2
2.2	How financial institutions appraise projects?	5	CO2
2.3	Explain the working of a Matrix Organization for executing projects.	5	CO2
2.4	Discuss the challenges in managing projects in digital era.	5	CO2

<table>
<tr><td colspan="4">SECTION-C
3Qx10M=30 Marks</td></tr>
<tr><td>3.1</td><td>Describe the impact of large infrastructure project on society and economic development of a country giving examples from India.</td><td>10</td><td>CO3</td></tr>
<tr><td>3.2</td><td>Mr. John has a project to be completed in 100 days, and the budget is USD 1000. After 50 days have passed and USD 700 has been spent with 60% of the work completed. What is the cost variance, cost performance index, and schedule performance index?</td><td>10</td><td>CO3</td></tr>
<tr><td>3.3</td><td>Why do we need contracts for executing projects? How will you check the validity of a contract?</td><td>10</td><td>CO3</td></tr>
<tr><td colspan="4">SECTION-D
2Qx15M= 30 Marks</td></tr>
<tr><td>4.1</td><td>A project consists of 12 activities whose precedence relationships and their time estimates are shown as follows:
<table>
<tr><td colspan="2">ACTIVITY</td><td>A</td><td>B</td><td>C</td><td>D</td><td>E</td><td>F</td><td>G</td><td>H</td><td>I</td><td>J</td><td>K</td><td>L</td></tr>
<tr><td colspan="2">Immediate Predecessor(s)</td><td>-</td><td>-</td><td>-</td><td>A</td><td>A</td><td>B,E</td><td>C</td><td>C</td><td>D</td><td>F,G</td><td>H</td><td>K</td></tr>
<tr><td rowspan="3">Time Estimates</td><td>Optimistic (a)</td><td>4</td><td>2</td><td>5</td><td>8</td><td>4</td><td>5</td><td>5</td><td>6</td><td>7</td><td>8</td><td>2</td><td>4</td></tr>
<tr><td>Most likely (m)</td><td>6</td><td>3</td><td>5</td><td>10</td><td>5</td><td>6</td><td>8</td><td>8</td><td>7</td><td>10</td><td>3</td><td>5</td></tr>
<tr><td>Pessimistic (b)</td><td>8</td><td>4</td><td>5</td><td>12</td><td>6</td><td>7</td><td>11</td><td>10</td><td>13</td><td>12</td><td>4</td><td>6</td></tr>
</table>
a) Find the duration and variance of each activity.
b) Draw the project network.
c) Find the critical path & corresponding expected project completion time.</td><td>15</td><td>CO4</td></tr>
<tr><td>4.2</td><td>A network consists of the following activities and duration are given in weeks.
<table>
<tr><td>Activity</td><td>Predecessor</td><td>Duration</td></tr>
<tr><td>A</td><td>--</td><td>9</td></tr>
<tr><td>B</td><td>A</td><td>2</td></tr>
<tr><td>C</td><td>A</td><td>12</td></tr>
<tr><td>D</td><td>A</td><td>5</td></tr>
<tr><td>E</td><td>B</td><td>6</td></tr>
<tr><td>F</td><td>B</td><td>8</td></tr>
<tr><td>G</td><td>C, F</td><td>3</td></tr>
<tr><td>H</td><td>D</td><td>2</td></tr>
<tr><td>I</td><td>H</td><td>8</td></tr>
<tr><td>J</td><td>G, I</td><td>6</td></tr>
<tr><td>K</td><td>E, J</td><td>2</td></tr>
</table>
a) Draw the network diagram.
b) Which activities form the critical path?
c) How much slack exists at activities A and F?
d) What is the duration of the critical path?</td><td>15</td><td>CO4</td></tr>
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