Name: **Enrolment No:**	

UPES
End Semester Examination, May 2024

Program: BBA-LLB-CL-VI-B2
BBA-LLB-CNTL-VI
BBA-LLB-CL-VI-B1
BBA-LLB-CRL-VI
BBA-LLB-EL-VI,
BBA-LLB-IPR-VI
BBA-LLB-TL-VI

Semester: VI

Subject/Course: Project Management **Max. Marks: 100**

Course Code: LSCM3001 **Duration: 180 Minutes**

Instructions:

SECTION A
5Qx2M=10Marks

S. No.		Marks	CO
	Statement of question		
A1	Suppose you evaluated the best-case, most likely, and worst-case duration estimates for an activity and determined that they were 3 days, 4 days, and 8 days, respectively. Using PERT estimation techniques, what would be the expected duration for the activity? a. 4 days b. 8 days c. 5 days d. 4.5 days	**2**	**CO1**
A2	If the project completion time is normally distributed and the due date for the project is equals to the expected completion time, then the probability that the project will be finished by the due date is a. less than 0.50.	**2**	**CO2**

	b. greater than 0.50. c. equal to 0.50. d. undeterminable without more information		
A3	All of the following distinguish project management from other process activities, except: a. There are no fundamental differences between project and process management. b. Project management often involves greater certainty of performance, cost, and schedule. c. Process management operates outside of line organizations. d. None of the above correctly distinguish project from process management.	**2**	**CO1**
A4	The project administrator is preparing a preliminary budget for a project and adds in the cost of a new computer for the project team to use. What type of cost would this computer purchase represent? a. Variable b. Direct c. Indirect d. Variable direct	**2**	**CO3**
A5	Suppose a project plan had three distinct paths through the network. The first path consisted of activities A (3 days), B (4 days), and C (2 days). The second path consisted of activities D (4 days), E (5 days), and F (5 days). The third path consisted of activities G (2 days), H (3 days), and I (10 days). Which is the critical path? a. ABC b. DEF c. GHI d. ADG	**2**	**CO4**
SECTION B **4Qx5M= 20 Marks**			
Q	Statement of question		
B1	What is a sacred cow model? Give some examples.	**5**	**CO1**
B2	What is the expected time estimate and variance of an activity in which the pessimistic time is 68 hours, optimistic time is 24 hours, and likely time is 48 hours? Show your work.	**5**	**CO3**
B3	Under what circumstances might you wish to crash a project? Discuss some real world scenario.	**5**	**CO2**
B4	Define the following terms: a. Brownfield Projects b. Work breakdown structure c. Float or Slack d. Critical path e. Critical activity	**5**	**CO2**
SECTION-C **2Qx10M=20 Marks**			

<table>
<tr><td>Q</td><td></td><td></td><td></td></tr>
<tr><td>C1</td><td>Name 4 quadrants of the BCG matrix? Develop a BCG to evaluate the welfare schemes of Government of India.</td><td>10</td><td>CO2</td></tr>
<tr><td>C2</td><td>Consider the six criteria for successful IT projects. Why is IT project success often so difficult to assess? Make a case for some factors being more important than others.</td><td>10</td><td>CO4</td></tr>
<tr><td colspan="4">SECTION-D
2Qx25M= 50 Marks</td></tr>
<tr><td>Q</td><td>Statement of question</td><td></td><td></td></tr>
<tr><td>D1</td><td>The managing partner of the Scott Corey accounting firm has decided that the system must be up and running in 16 weeks. Consequently, information about crashing the project was put together and is shown in the following table:
<table>
<tr><th>Activity</th><th>Immediate Predecessors</th><th>Normal Times (Weeks)</th><th>Crash Time (Weeks)</th><th>Normal Cost ($)</th><th>Crash Cost ($)</th></tr>
<tr><td>A</td><td>--</td><td>3</td><td>2</td><td>8000</td><td>9800</td></tr>
<tr><td>B</td><td>--</td><td>4</td><td>3</td><td>9000</td><td>10,000</td></tr>
<tr><td>C</td><td>A</td><td>6</td><td>4</td><td>12000</td><td>15000</td></tr>
<tr><td>D</td><td>B</td><td>2</td><td>1</td><td>15000</td><td>15500</td></tr>
<tr><td>E</td><td>A</td><td>5</td><td>3</td><td>5000</td><td>8700</td></tr>
<tr><td>F</td><td>C</td><td>2</td><td>1</td><td>7500</td><td>9000</td></tr>
<tr><td>G</td><td>D, E</td><td>4</td><td>2</td><td>8000</td><td>9400</td></tr>
<tr><td>H</td><td>F, G</td><td>5</td><td>3</td><td>5000</td><td>6600</td></tr>
</table>
a. If the project is to be finished in 16 weeks, which activity or activities should be crashed to do this at the least additional cost? What is the total cost of this?
b. List all the paths in this network. After the crashing in part (a) has been done, what is the time required for each path? If the project completion time must be reduced another week so that the total time is 15 weeks, which activity or activities should be crashed?

OR</td><td>25</td><td>CO4</td></tr>
</table>

<table>
<tr>
<td></td>
<td>A 4-year financial project has net cash flows of $20,000; $25,000; $30,000; and $50,000 in the next 4 years. It will cost $75,000 to implement the project. If the required rate of return is 0.2, conduct a discounted cash flow calculation to determine the NPV.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2</td>
<td>Consider a project with the following activities.
The information on these activities is shown in the following table:

<table>
<tr><th>Activity</th><th>To</th><th>Tm</th><th>Tp</th><th>Immediate Predecessors</th></tr>
<tr><td>A</td><td>8</td><td>11</td><td>14</td><td></td></tr>
<tr><td>B</td><td>6</td><td>8</td><td>10</td><td></td></tr>
<tr><td>C</td><td>3</td><td>5</td><td>7</td><td></td></tr>
<tr><td>D</td><td>10</td><td>20</td><td>30</td><td>A</td></tr>
<tr><td>E</td><td>6</td><td>7</td><td>8</td><td>C</td></tr>
<tr><td>F</td><td>9</td><td>10</td><td>11</td><td>B,D,E</td></tr>
<tr><td>G</td><td>6</td><td>8</td><td>10</td><td>B,D,E</td></tr>
<tr><td>H</td><td>14</td><td>15</td><td>16</td><td>F,G</td></tr>
<tr><td>I</td><td>10</td><td>12</td><td>14</td><td>G</td></tr>
<tr><td>J</td><td>6</td><td>7</td><td>8</td><td>F,G</td></tr>
<tr><td>K</td><td>4</td><td>11</td><td>12</td><td>H,I</td></tr>
</table>

(a) Construct an AOA network for this problem.
(b) Determine the expected time and variance for each activity.
(c) Determine the critical path(s) and project completion time.
(d) Determine the probability that the project will be finished in 72 days or less.
(e) Determine the probability that the project will be finished in 85 days or less.
(f) Determine the probability that the project will be finished in 52 days or less.</td>
<td>25</td>
<td>CO4</td>
</tr>
</table>