REG.NO.:

VIT
Vellore Institute of Technology

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING
MID TERM EXAM
SUMMER SEMESTER 2024-2025

SLOT: E1+E2+TE1+TE2

Programme Name & Branch	: M. Tech & MIC/MID
Course Code and Course Name	: CSI3015, Software Project Management
Faculty Name(s)	: Prof. DEEPA D, Prof. ADRIJA B, Prof. SHARMIA C
Class Number(s)	: VL2024250700166, VL2024250700188, VL2024250701093
Date of Examination	: 10.06.2025
Exam Duration	:90 minutes

Maximum Marks:50

General instruction(s):

- Answer All Questions
- M- Max mark; CO – Course Outcome; BL – Blooms Taxonomy Level (1 – Remember, 2 – Understand, 3 – Apply,4 – Analyse,5 – Evaluate,6 – Create)
- Course Outcomes:

CO1: Actively participate or successfully manage a software development project by applying project management concepts
CO2: Demonstrate knowledge of project management terms and techniques
CO3: Analyze the Steps involved in analyzing the Software projects and concepts to meet the estimation of the software Projects.

<table>
<tr><th>Q.No</th><th>Question</th><th>M</th><th>CO</th><th>BL</th></tr>
<tr><td>1.</td><td>Draw the network diagram for the given data. Determine the earliest and latest times, the total float for eachactivity, the critical activities and the project completion time and the critical path.
<table>
<tr><th>Activity</th><th>Predecessor Activity</th><th>Duration (Weeks)</th></tr>
<tr><td>A</td><td>-</td><td>12</td></tr>
<tr><td>B</td><td>A</td><td>7</td></tr>
<tr><td>C</td><td>A</td><td>11</td></tr>
<tr><td>D</td><td>A</td><td>8</td></tr>
<tr><td>E</td><td>A</td><td>6</td></tr>
<tr><td>F</td><td>B</td><td>10</td></tr>
<tr><td>G</td><td>C</td><td>9</td></tr>
<tr><td>H</td><td>D, F</td><td>14</td></tr>
<tr><td>I</td><td>E, G</td><td>13</td></tr>
<tr><td>J</td><td>H, I</td><td>16</td></tr>
</table></td><td>10</td><td>CO3</td><td>3</td></tr>
<tr><td>2.</td><td>a) Consider the development of a new e-commerce application. Identify and explain sample project milestones and key deliverables at different stages of the development lifecycle.(3)
b) Draw a diagram showing the work break down structure (WBS) for the system.(7)</td><td>10</td><td>CO2</td><td>3</td></tr>
<tr><td>3.</td><td>a) Briefly describe any five Project Management knowledge areas. (5)
b) A renowned hospital is developing a new e-health platform primarily to help patients. Identify the internal and external stakeholders of the software system. (5)</td><td>10</td><td>CO1</td><td>2</td></tr>
<tr><td>4.</td><td>a)Explain the concept of Risk Categorization in Project Risk Management. Describe common risk categories and provide two examples of Business Risk. (6)</td><td>10</td><td>CO3</td><td>3</td></tr>
</table>

	b) Illustrate the Risk Management Process with a simple diagram and brief about the importance of Risk Monitoring in this process. (4)			
5.	A project consists of seven activities with the following timeestimates. Find the probability that the project will be completed in 30weeks or less. [Z_{1414}=0.4207]	10	CO3	3

Activity	Predecessor Activity	Optimistic time estimate (to days)	Most likely time estimate (tm days)	Pessimistic time estimate (tp days)
A	-	2	5	8
B	A	2	3	4
C	A	6	8	10
D	A	2	4	6
E	B	2	6	10
F	C	6	7	8
G	D, E, F	6	8	10

****