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BME654A

Sixth Semester B.E./B.Tech. Degree Examination, June/July 2025

Project Management

Time: 3 hrs.

Max. Marks: 100

- Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
 2. M : Marks , L: Bloom's level , C: Course outcomes.
 3. Use of normal distribution table is permitted.*

Module – 1			M	L	C
Q.1	a.	Discuss the project life cycle with neat sketch.	12	L2	CO1
	b.	Define project and list its characteristics.	8	L1	CO1
OR					
Q.2	a.	Explain the steps involved in the strategic planning process.	12	L2	CO1
	b.	Explain the project selection methods.	8	L2	CO1
Module – 2					
Q.3	a.	Explain the stages in project planning process in detail.	10	L2	CO2
	b.	Discuss the work breakdown structure in detail.	10	L2	CO2
OR					
Q.4	a.	Discuss project scheduling process, its development and purpose.	10	L2	CO2
	b.	Explain : i) Gantt chart ii) Monte Carlo simulation.	10	L2	CO2
Module – 3					
Q.5	a.	Discuss the abilities needed when resourcing project.	10	L2	CO3
	b.	Explain cost planning, cost estimating and cost budgeting.	10	L2	CO3
OR					
Q.6	a.	Explain briefly risk identification and risk analysis involved in project management.	10	L2	CO3
	b.	What do you understand by project quality tools and explain kick off projects?	10	L2	CO3
Module – 4					
Q.7	a.	Discuss different types of contract with examples.	10	L2	CO4
	b.	Explain the process involved in project supply chain management.	10	L2	CO4

OR

Q.8	a.	What is Knowledge Management? How does Knowledge Management help in Project Management?	10	L2	CO4
	b.	Write a note on: i) Project Balanced Scorecard Approach. ii) Finishing the project.	10	L1	CO4

Module – 5

Q.9	a.	Write the difference PERT and CPM.	8	L1	CO5																																		
	b.	A small project is composed of seven activities whose time estimates are listed in the table. <table border="1" data-bbox="574 524 1065 846"> <thead> <tr> <th rowspan="2">Activity</th> <th colspan="3">Estimated duration (weeks)</th> </tr> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>1-2</td> <td>1</td> <td>1</td> <td>7</td> </tr> <tr> <td>1-3</td> <td>1</td> <td>4</td> <td>7</td> </tr> <tr> <td>1-4</td> <td>2</td> <td>2</td> <td>8</td> </tr> <tr> <td>2-5</td> <td>1</td> <td>1</td> <td>1</td> </tr> <tr> <td>3-5</td> <td>2</td> <td>5</td> <td>14</td> </tr> <tr> <td>4-6</td> <td>2</td> <td>5</td> <td>8</td> </tr> <tr> <td>5-6</td> <td>3</td> <td>6</td> <td>15</td> </tr> </tbody> </table> i) Draw the project network. ii) Find the expected duration and variance of each activity. iii) Calculate early and late occurrence time for each event. What is the expected project length? iv) Calculate the variance and standard deviation of project length? What is the probability that the project will be completed? I. At least 4 weeks earlier than expected. II. No more than 4 weeks earlier than expected. v) If the project due date is 19 weeks, what is the probability of meeting the due date?	Activity	Estimated duration (weeks)			a	b	c	1-2	1	1	7	1-3	1	4	7	1-4	2	2	8	2-5	1	1	1	3-5	2	5	14	4-6	2	5	8	5-6	3	6	15	12	L3
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OR

Q.10	a.	Discuss crashing of simple project in detail.	8	L2	CO5
	b.	A project consists of a series of tasks labeled A, B, ... H, I with the following relationships (W < X, Y means X and Y cannot start until W is completed) with this notation, construct the network diagram having the following constraints: A < D, E ; B, D < F ; C < G ; B < H ; F, G < I. Find also minimum time of completion of the project when the time (in days) of completion of each tasks is as follows: Task Time A 23 B 8 C 20 D 16 E 24 F 18 G 19 H 4 I 10 Also find ES, EF, LS, LF and TF.	12	L3	CO5
