CLASS: B.TECH.   SEMESTER : V/VII
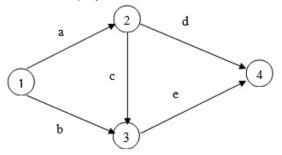BRANCH: BT/CHEMICAL/CS/IT/EEE/ECE/ME   SESSION : MO/22

SUBJECT: PE309 PROJECT MANAGEMENT
TIME: 3 hrs.   FULL MARKS: 50

INSTRUCTIONS:
1. The question paper contains 5 questions each of 10 marks and total 50 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
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Q.1(a)	How can standard routine production be differentiated from a project work?	[2]CO1, L2
Q.1(b)	What do you mean by 'triple constraints' of a project?	[3]CO1,L1
Q.1(c)	Explain various stages in project life cycle.	[5]CO3,L2
Q.2(a)	State the roles of a project manager.	[2]CO1,L1
Q.2(b)	What are the causes of delay in projects? How can you eliminate them?	[3]CO1,3,L2
Q.2(c)	Explain the significance of different organization structures in the context of project management.	[5]CO1, L2
Q.3(a)	Briefly explain 'Environmental Impact Assessment (EIA)'.	[2]CO2,L2
Q.3(b)	Social cost benefit analysis (SCBA) is an important aspect in public projects – Justify.	[3]CO1,3,L4
Q.3(c)	Explain the concept of feasibility study of a project with an example.	[5]CO1,3,L2
Q.4(a)	What are the significance of slack and float times in project network?	[2]CO1.4,L1
Q.4(b)	Explain with diagram: activity on node (AON) and activity on arc (AOA)	[3]CO1,4,L2
Q.4(c)	Consider the following data to construct the project network and determine the critical path.	[5]CO4,L3

Activity	Dependencies	Duration
A	-	2
B	-	2
C	-	4
D	-	8
E	A, F	3
F	B	4
G	C, D, E	3
H	D, G	2
I	E	7
J	G	6

Q.5(a)	Distinguish between PERT and CPM.	[3]CO1,4,L4
Q.5(b)	Consider the project network shown below.	[7]CO4,L3

Table: CPM project time and cost data

Activity	Normal Time (days)	Crash time (days)	Normal cost ($)	Crash cost ($)
a	4	3	400	800
b	8	5	600	2400
c	6	5	1000	1200
d	9	8	700	1400
e	5	2	1200	2700
Total Cost			$3900	$8500

Determine the minimum cost crash solution.

:::::25/11/2022:::::M