PRN:		Course Code :	CET 2703

Final Year **B. Tech** End Semester Examination Winter 2024

Project Management & Construction Equipment

000153

Day and Date: Wed 27 NOV 2024 Max Marks: **100**

Time : 10.30AM To 01.30PM Duration: **03** hrs

Instructions: All questions are compulsory.

			Marks	Bloom's Level	CO
Q.1		**Attempt the following**			
	a)	Discuss various phases of Project Management.	08	L2	CO1
	b)	Explain work breakdown structure with its sketch.	08	L2	CO1
		OR			
	b)	Summarize role of project manager.	08	L2	CO1
Q.2		**Attempt the following**			
	a)	Draw the network. Determine Critical Path. Find out Project Duration FT and FF.	08	L2	CO2

Act.	1-2	2-3	2-4	3-6	3-7	4-5	4-6	5-7	6-7
Dur^n.	2	4	5	6	5	4	1	3	2

	b)	Differentiate between CPM & PERT.	08	L2	CO2
		OR			
	b)	Explain Gantt Charts & Milestone charts with its advantages and limitation.	08	L2	CO2
Q.3		**Attempt any two from the following**			
	a)	Classify various characteristics of probability distribution.	08	L3	CO2
	b)	Explain Network Updating. Show when to update the network and what data is required while updating.	08	L3	CO2
	c)	A Project is expected to take 15 months along critical path having standard deviation of 3 months. Calculate the probability of completing project with following data: i)15 months ii)18 months iii)12 months	08	L3	CO2

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Q.4		**Attempt any two from the following**			
	a)	Compare mechanical and manual construction.	08	L3	CO3
	b)	Show working of Hoe with neat sketch.	08	L3	CO3
	c)	What advantages a hydraulic excavators have due to its hydraulic control? State advantages and disadvantages of it..	08	L3	CO3
Q.5		**Attempt any Two of the following**			
	a)	Categorized various types of cranes. Explain any two with neat sketches.	09	L4	CO3
	b)	Identify and Explain various types of tractors used in construction with its sketch.	09	L4	CO3
	c)	Explain clamshell with neat sketch.	09	L4	CO3
Q.6		**Attempt any Two of the following**			
	a)	Explain various explosives used for blasting. Also explain detonators.	09	L4	CO4
	b)	Summarize precautions taken during i) Transportation of explosives ii) Storage of explosives	09	L4	CO4
	c)	Discuss various types of excavating equipment in hard rock. Explain jackhammer with sketch.	09	L4	CO4

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