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BCV501

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BANGALORE

Fifth Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026
Construction Management and Entrepreneurship

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.

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Module – 1

			M	L	C
Q.1	a.	Define Management. Explain characteristics of Management.	10	L2	CO1
	b.	The activity data of a project is given in the table below : (see table) Draw the network diagram. Identify the critical path and project duration using CPM.	10	L3	CO1

Activity	Predecessor	Duration (in days)
A	–	4
B	–	3
C	A, B	2
D	A, B	5
E	B	6
F	C	4
G	D	3
H	F, G	7
I	F, G	4
J	E, H	3

OR

			M	L	C
Q.2	a.	List the statutory and regulatory requirements in construction. Explain any 2 [two] of them.	10	L2	CO1
	b.	Differentiate between CPM and PERT and mention its applications.	10	L3	CO1

Module – 2

			M	L	C
Q.3	a.	List the factors affecting labour productivity. Briefly discuss any three factors.	8	L2	CO2
	b.	Estimate the hourly production in bulk volume (LCM) of a back hoe with bucket capacity of $1.14M^3$ that is employed on excavation of a foundation, which is 3m deep in hard digging soil. The excavated earth is to be loaded in waiting dump trucks, placed at a swing angle of 75°. The expected performance efficiency is 81% with the following data : i) Ideal output of loose soil in M^3 (LCM) = 180 LCM ii) Equipment conversion factor operating at optimum depth = 0.8 iii) Correction factors are : soil factor per hard digging = 0.67 Load factor for loading into vehicle = 0.8 Swing factor = 1.05.	8	L3	CO2
	c.	What is the purpose of having material management system in construction?	4	L2	CO2

		OR			
Q.4	a.	Enumerate the factors to be considered for selection of construction equipments.	7	L2	CO2
	b.	Explain different costs involved in owning and operating the equipments.	8	L2	CO2
	c.	The purchase value of a crawler tractor is Rs.30,00,000. Its assessed resale value after using for 5 years is 10% of the delivered price. The equipment is planned to operate 2000 hours per year. Calculate its annual and hourly depreciation.	5	L3	CO2
		Module – 3			
Q.5	a.	What is Procurement? Explain the types and stages involved in procurement.	10	L2	CO3
	b.	Explain different steps involved in procurement execution. Also mention the challenges in procurement execution.	10	L2	CO3
		OR			
Q.6	a.	List the different types of contracts and explain any three (3) of them.	10	L2	CO3
	b.	Explain the steps involved in Tender Evaluation.	10	L2	CO3
		Module – 4			
Q.7	a.	Explain different Quality Management Barriers.	8	L2	CO4
	b.	Describe few of the quality management tools.	8	L2	CO4
	c.	Write short notes on occupational health, safety and environment.	4	L1	CO4
		OR			
Q.8	a.	Briefly explain the Risk Management Process.	8	L2	CO4
	b.	Briefly explain the elements of Safety Management System.	6	L2	CO4
	c.	Write short notes on : i) Completion certificate ii) Occupancy certificate iii) Facilities management.	6	L1	CO4
		Module – 5			
Q.9	a.	List the characteristics of a successful entrepreneur and explain any 4[four] of them.	10	L2	CO5
	b.	Write short notes on : i) 5M model of entrepreneurship ii) Stages in entrepreneurial process.	10	L1	CO5
		OR			
Q.10	a.	Discuss in detail about the project report for starting a new venture.	10	L2	CO5
	b.	Write short notes on : i) Foreign Direct Investment ii) Venture capital.	10	L1	CO5

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