BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)

CLASS: B.TECH / B.ARCH   SEMESTER : V
BRANCH: BT/CHEMICAL/CS/EEE/IT/MECH/ARCH   SESSION : MO/2022

SUBJECT: CE428 CONSTRUCTION MANAGEMENT

TIME: 3:00 Hours   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. Before attempting the question paper, be sure that you have got the correct question paper.
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

Q.1(a)	Matrix organizations are a blend of functional and projectized characteristics. Explain	[2] CO2/BL3
Q.1(b)	Differentiate between centralized and decentralized forms of a construction company.	[3] CO2/BL3
Q.1(c)	Discuss different forms of business organization firms.	[5] CO2/BL3

Q.2(a)	Describe the factors affecting cash flow diagram.	[2]CO2/BL2
Q.2(b)	Explain the criteria to evaluate public projects.	[3] CO2/BL3
Q.2(c)	The details of the financial transactions during the months of April, May and June for construction company are given in Table. Draw a neat cash-flow diagram for the transactions.	[5]CO2/BL4

Date	Description	Amount (In Rs.)
April 5	Receipt for running account bill # 1	150,000
April 10	Salary disbursement	80,000
April 16	Payment for supply of aggregates	20,000
April 21	Payment for supply of stationery for office use	5,000
May 7	Receipt for running account bill # 2	180,000
May 10	Salary disbursement	80,000
May 28	Payment for supply of cement	50,000
June 6	Receipt for running account bill # 3	250,000
June 10	Salary disbursement	80,000
June 16	Payment for supply of structural steel	100,000
June 28	Payment of rent of premises for July and August	100,000

Q.3(a)	Outline the advantages and disadvantages of centralized and local purchasing.	[2] CO3/BL3
Q.3(b)	A construction material trading company receives a total of 200 ton as annual demand for steel reinforcement. The annual cost of carrying per-unit ton of reinforcement is Rs. 2,000, and the cost to place an order is Rs. 25,000. What is the economic order quantity?	[3]CO3/BL3
Q.3(c)	Differentiate between ABC analysis, VED analysis and FSN analysis.	[5]CO3/BL3

Q.4(a)	Explain about total quality management. To what extent is it different from quality assurance system?	[2] CO3/BL3
Q.4(b)	Discuss inspection, quality control and quality assurance in a construction project.	[3] CO3/BL3
Q.4(c)	Describe the importance of audit in the context of quality conformance.	[5] CO3/BL3

Q.5(a)	Discuss about the role of safety officer in construction site.	[2] CO3/BL3
Q.5(b)	Explain safety-related problems in the Indian construction industry. Summarize various hazards associated with the construction industry as regards safety?	[3] CO3/BL4
Q.5(c)	Describe causes of accidents at construction sites.	[5] CO3/BL3