

Reg. No.

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B.E./ B. TECH.DEGREE EXAMINATIONS, MAY 2023

Seventh Semester

CE18701 – Principles of Construction Management

(Common to CVE, CSE, INT, EEE, ECE & MAR)

(Regulation2018/2018A)

TIME:3 HOURS

MAX. MARKS: 100

COURSE OUTCOMES	STATEMENT	RBT LEVEL
CO 1	Describe the steps involved in project life cycle and explain the factors influencing changing environment of construction industry	3
CO 2	Identify the various risks and prepare the organizational structure for the construction project	3
CO 3	Summarise the design methodology, technological and economic feasibility involved in construction projects.	3
CO 4	Describe how to manage Labour, Material and Equipment effectively in construction projects.	3
CO 5	Illustrate the different types of construction cost estimates.	3

PART- A(10x2=20Marks)

(Answer all Questions)

	CO	RBT LEVEL
1. Distinguish between general and specialty contractor.	1	1
2. List out the different skills of a project manager	1	2
3. List out the different types of organizational structure.	2	2
4. What are the various functions of project management?	2	2
5. What is Value Engineering?	3	1
6. Why it is necessary to integrate design and construction process?	3	2
7. What is the importance of inventory management?	4	2
8. List out the different types of equipment commonly used in construction projects.	4	2
9. What are the different types of cost associated with construction projects?	5	2
10. Write the advantages of computer aided cost estimation.	5	2

PART- B (5x 14=70Marks)

	Marks	CO	RBT LEVEL
11. (a) Explain the various factors that influence the changing operating environment of the construction industry.	(14)	1	3

(OR)

- (b) Explain the different phases of a project life cycle specifying the activities to be carried out in each of the phases. (14) 1 3
12. (a) Discuss in detail on Turnkey operation and Owner-Builder operation. (14) 2 4
(OR)
- (b) An infrastructure project was planned to be construct in the outskirts of a city. As a civil engineer, identify and explain the various risks associated with the project. (14) 2 4
13. (a) Explain the key elements to be included in the technological feasibility study. Why innovative design concepts must be tested for technological feasibility for any infrastructure project? (14) 3 4
(OR)
- (b) State the objectives of the functional design. Illustrate in detail about the integrated functional design for any proposed construction project. (14) 3 4
14. (a) Explain in detail about the various factors affecting the selection of construction equipment. (14) 4 4
(OR)
- (b) Discuss in detail about the various factors affecting the job-site productivity of construction project. (14) 4 4
15. (a) Explain in detail the effects of scale economics on construction cost with an example. (14) 5 4
(OR)
- (b) Enumerate the different types of construction cost estimates with an example. (14) 5 4

PART- C (1x 10=10Marks)

(Q.No.16 is compulsory)

- | | | Marks | CO | RBT LEVEL |
|-----|---|-------|----|-----------|
| 16. | Describe the legal and regulatory requirements for a good construction project. | (10) | 1 | 5 |
