

**BACHELOR OF CONSTRUCTION ENGINEERING
EXAMINATION, 2024**

(4th Year, 1st Semester)

CONSTRUCTION MANAGEMENT - II

Time : Three hours

Full Marks : 100

(50 marks for each part)

(Use a separate Answer script for each part)

Part – I (50 Marks)

1.

Activity	Predecessor	Duration (Days)
A		2
B	A	4
C	B	2
D	C	5
E	C	8
F	D, E	6
G	F	7

With this above mentioned activity chart, prepare following things.

- Precedence Network Diagram
- Critical Analysis Matrix
- Prepare a critical path and find out the total time required to finish the work, showing forward and backward path.

[Turn over

[2]

2. “In PERT method we arrive at an estimate of time using a weighted average to reduce risk.” — Explain the above mentioned statement with example. 5
3. What are the different benefits of Work Break Down Structure method? 5
4. Mention three important components of construction infrastructure and write short notes on them. 15

Part – II (50 Marks)

Attempt *any five* questions.

1. Explain the following terms with example in reference to a valid contract as per Indian Contract Act, 1872:
 - a) Lawful objective
 - b) Lawful consideration
 - c) Free consent
 - d) Competent to contract 4 2½ 10
2. a) What is the purpose of having technical and financial eligibility criteria in schedule rate contract? How are these ensured before finalizing the tender? 3+3=6
 - b) Explain the term ‘Force Majeure’. 4
3. a) What are the disadvantages of a schedule rate contract? 4

[3]

- b) How the obligation of owner different in schedule rate contract and EPC contract? 4
- c) Explain the term ‘Early Completion Bonus’ with respect to EPC contract. 2
4. a) What is the purpose of R&R assistance in land acquisition as RFCTLARR Act, 2013? 4
 - b) Mention 3 (three) important shortcomings of RFCTLARR Act, 2013. 3
 - c) What are the features of PPP? Explain with suitable example. 3
5. a) What do you mean by limited and unlimited liability in case of business enterprises? Explain with an example. 5
 - b) Where are the provisions of Contract Labour (Regulation & Abolition) Act applicable? 5
6. a) Classify the laws on social security in India. 4
 - b) Enumerate the difference between Provident Fund and Gratuity in reference to social security provisions of workers in India. 4
 - c) Who all are responsible for payment of wages with respect to Payment of Wages Act, 1936? 2