

GUJARAT TECHNOLOGICAL UNIVERSITY**BE – SEMESTER- VII EXAMINATION-SUMMER 2023****Subject Code: 3170614****Date: 27/06/2023****Subject Name: Construction Engineering and Management****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

- Q.1** (a) Discuss reason behind the importance of construction management. **03**
(b) Justify in detail role of General Foreman at construction site. **04**
(c) Explain Pre-project phase and post project phase in detail. **07**
- Q.2** (a) Briefly explain VED analysis. **03**
(b) Differentiate between serial and Parallel activities. **04**
(c) Write a short note on Indian construction industry. **07**
- OR**
- (c) Explain Fulkerson's rules for numbering the events of a network. **07**
- Q.3** (a) Distinguish between CPM and PERT. **03**
(b) Discuss evaluation of a public projects. **04**
(c) What is job layout? Draw job layout structure of a large housing project. **07**
- OR**
- Q.3** (a) Explain developing site organization. **03**
(b) Define material management. Explain its objective. **04**
(c) What mean by organization? Explain characteristics of good organization. **07**
- Q.4** (a) Discuss positive points of scheduling. **03**
(b) Enlist duties of Executive Engineer and Assistant Engineer. **04**
(c) Enlist merits and demerits of centralized and local purchasing. **07**
- OR**
- Q.4** (a) Explain project control process. **03**
(b) Differentiate between quality control and quality assurance. **04**
(c) Define mean of inspection. Also Prepare a checklist for column form work inspection before casting which carried out at construction site. **07**
- Q.5** (a) What is mean by tool box meeting? Enlist various PPE which required at construction site. **03**
(b) Discuss job of safety officer at site. Explain important of assembly point at site. **04**
(c) Enlist the all causes of accident happening at site. Also discuss about remedial measures to prevent it. **07**
- OR**
- Q.5** (a) Explain terms Loading time, Return time and Dumping time. **03**
(b) Give comparison between conventional construction method and mechanized method. **04**
(c) Enlist the various hoisting equipment. Explain Tower crane and Winch with neat sketch. **07**
