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GIET UNIVERSITY, GUNUPUR – 765022

M. Tech (First Semester – Regular) Examinations, June – 2021

MPCCT1020- QUALITY & SAFETY IN CONSTRUCTION

(Construction Technology and Management)

Maximum: 50 Marks

Time: 2 hrs

The figures in the right hand margin indicate marks.

PART – A

 $(2 \times 10 = 20 \text{ Marks})$

 $(6 \times 5 = 30 \text{ Marks})$

Q1. Answer **ALL** questions

- a. Why does the sample standard deviation is preferred over the population standard deviation in the statistical quality assurance for construction materials.
- b. What do you infer by the term "tolerance" in material specification for construction projects?
- c. Write a short note on the Accident-Proneness Theory.
- d. Does the chain-of-events theory place the blame for accidents on management?
- e. What do you mean by OSHA regulations in construction safety?
- f. Criticize the "Substance Abuse Programs".
- g. Construct an accident reporting process for minor welding works in a construction project.
- h. Recall the zero-accidents concept or policy in a heavy construction company.
- i. Criticize the Governments' intervention in the construction safety considerations.
- j. Write a short note on the safety clauses in the international contract or agreements.

PART – B

Answer ANY FIVE questions Marks 2. Elaborate the four pillars of TQM with neat illustrations. (6) 3. Explain in brief the implications of statistical quality assurance for any two building (6) materials. 4. Discuss about any five major causes of injuries in a construction project. (6) 5. Explain in detail the role of middle managers in the implementation of safety in the (6) organization. 6. Prepare a detailed checklist for safety audit of a reinforcement bar manufacturing unit. (6) 7. Discuss in brief any two governing laws regarding safety in construction projects in (6) India.

8. Criticize the role of safety committees in ensuring safety practices and identifying (6) violations in a mega construction project.

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