

Code No: **RT42014F****R13****Set No. 1****IV B.Tech II Semester Regular/Supplementary Examinations, April - 2018****SAFETY ENGINEERING****(Civil Engineering)****Time: 3 hours****Max. Marks: 70***Question paper consists of Part-A and Part-B**Answer ALL sub questions from Part-A**Answer any THREE questions from Part-B************PART-A (22 Marks)**

1. a) Write short notes on contractual clauses. [4]
b) What are various causes of accidents? [4]
c) What are the requirements for safe work platforms? [3]
d) Explain use of grinding tools. [4]
e) Explain safety in demolition work. [3]
f) Explain in briefly fire hydrant and extinguishers. [4]

PART-B (3x16 = 48 Marks)

2. a) What are pre contract activities? Explain them. [8]
b) Explain briefly about construction regulations. [8]
3. a) Define Scaffoldings. Explain various types of scaffoldings with neat sketches. [8]
b) What are the prevention methods that are taken in the construction of high rise buildings? [8]
4. a) Describe fall protection in construction according to OSHA. [8]
b) Explain about work permit systems. [8]
5. a) What are the different types of excavation equipment? Explain any two of them. [8]
b) Describe about conveyors. Explain the uses of conveyors and Mobile cranes. [8]
6. a) What are the various types of health hazards involved in demolition works? [8]
b) Explain about safe clearance zone during demolition work. [8]
7. a) What are the fire safety measures taken in the use of portable tools? [8]
b) Describe about emergency planning during fire accidents. [8]