

JK Lakshmipat University Jaipur
INSTITUTE OF ENGINEERING AND TECHNOLOGY

Mid Term Examination-II (Backlog), April 2024
B. Tech. (Open Elective), Semester VI

Roll No.....

Course Code and Name : CE2204
Safety in Construction and Mining

Time: 1.5 hours Max. Marks: 40

Instructions to students:

1. Do not write anything other than your roll number on question paper.
2. Assume suitable data wherever required and mention it clearly.
3. Writing appropriate units, nomenclature, and drawing neat sketches/schematics/ flow chart wherever, required are an integral part of the answer.
4. Write your answers in detail and it should be appropriate to the marks assigned for that question.

1. What are the different safety measures that should be taken if a railway construction site is located in a hilly area and there may be a chance of heavy rainfall and landslides in that area?

CO 1,4,5 (6)

2. What are the different safety measures should be taken if a 10-12 story building is constructed in a crowded area? Name various safety equipment which will be provided for the construction of this building.

CO 2,4,5 (4+4)

What are the different safety measures that should be taken in retrofitting an old building in a crowded area?

CO 2,4,5 (4)

3. Mining is one of the most important sectors in India which employs skilled and unskilled labourers. What are the biggest safety concerns in mines?

CO 1,2,3 (6)

4. The steps for risk assessment and risk management in iron ore mines are as follows:

- i. Hazards identification
- ii. Ranking of hazards as per their probability and consequences
- iii. Management of hazards as per their ranking

Prepare the risk rating matrix for the major risks that you have identified related to iron ore mining and also predict the ranking of hazards as per their probability and consequences. CO 2,3,5 (8)

5. How will you conduct an accident investigation in marbal and granite mining?

CO 1,4,5 (4)

6. What are precautions should be taken for waste material dumping yards related to open mining?

CO 2,6 (4)