

R22

Code No: 183AW

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech II Year I Semester Examinations, February - 2024

ENGINEERING GEOLOGY

(Civil Engineering)

Time: 3 Hours

Max. Marks: 60

Note: This question paper contains two parts A and B.

i) Part- A for 10 marks, ii) Part - B for 50 marks.

- Part-A is a compulsory question which consists of ten sub-questions from all units carrying equal marks.
- Part-B consists of **ten questions** (numbered from 2 to 11) **carrying 10 marks each**. From each unit, there are two questions and the student should answer one of them. Hence, the student should answer five questions from Part-B.

PART- A

(10 Marks)

- 1.a) Define spheroidal weathering. [1]
- b) What are the types of igneous rocks? [1]
- c) Mention Moh's scale of hardness. [1]
- d) Mention textures of igneous rock. [1]
- e) Define unconformity. [1]
- f) What is soil stabilization? [1]
- g) What is Richter scale? [1]
- h) Discuss the seismic refraction method. [1]
- i) Mention various types of dams. [1]
- j) Define tunnel overbreak. [1]

PART - B

(50 Marks)

2. Discuss the scope of civil engineering in various aspects of urbanization. [10]
OR
3. Emphasize the importance of weathering in civil engineering construction. [10]
4. Discuss various physical properties of pyroxene group of minerals. [10]
OR
5. Enumerate various classification of igneous rock. [10]
6. Discuss classification of fault and their importance. [10]
OR
7. Explain the classification of unconformity and their importance. [10]
8. Discuss various measures of earth quake resistant design approaches. [10]
OR
9. Elaborate various types of seismic investigation methods. [10]
10. Enumerate the geological considerations of construction of reservoir. [10]
OR
11. Elaborate the various geological considerations for dam construction. [10]