

## DOON UNIVERSITY, DEHRADUN

#### End Semester Examination-2023, Second Semester

Academic Year 2023-2024

# Department of Geology (NHRSC)

B.Sc. Geology

**GEE-104 - SEISMOLOGY** 

Time Allowed 2.00 Hours

Maximum Marks: 50

SECTION: A

### Attempt all questions.

 $(4 \times 5 = 20 \text{marks})$ 

- 1. Difference between focus and epicentre
- 2. Longitudinal and transverse waves
- 3. Effects of earthquake
- 4. Young Modulus
- 5. Poisson Ratio

SECTION: B

#### Attempt all questions.

(5X4= 20marks)

- 1. Discuss about the seismic zonation of India.
- 2. What is seismic shadow zone?
- 3. What is worldwide standard seismograph network?
- 4. Discuss why the maximum earthquake occurs in Circum Pacific Belt.

#### SECTION: C

(10 marks)

5. Discuss about elastic rebound theory. Considering the elastic rebound, a spring is 0.58 meter long, when it is pulled by a force of 4.0 N, it stretches to 0.62 meters. What will be the spring constant?

OR

Describe Alpine Himalayan Belt.