## **PD-182**

## (581) M.Sc. GEOLOGY (I SEM.)

Examination: Dec.-2020 Compulsory/Optional

STRUCTURAL GEOLOGY-I

## Compulsory/Option Paper-I

Time: Three Hours]

[Maximum Marks: 80

[Minimum Pass Marks: 29

नोट : दोनो खण्डो से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित है। Note: Answer from Both the Section as Directed. The figures in the right hand margin

indicate marks.

## Section -A

1. Answer the following question

1X10

- a. Draw a neat diagram of strain ellipsoid.
- b. Divine the term- Rock-Deformation.
- c. Define the fold Axis.
- d. Give the characteristics of mural joints.
- e. Define the Reverse fault.
- f. Define Ductile shear Zone.
- g. What do you mean by cleavages in rocks.
- h. Define the structure; Lineation.
- i. Give the types of Tectoriter.
- j. Define the Main phase-of Himalayan orogeny

Section -B

2. Answer the following Short question.

2x5

- a. What is relationship between stress & Strain?
- b. Describe the fold geometry.
- c. Write a brief notes on mechanism of faulting.
- d. Define the Plutons.
- e. What are the applications of stereographic projections?

Section -C

Answer all questions:

12X5

3. Write a note on Rock-deformation:-

OR

Describe strain ellipsoid & give their geological significance.

4. Give the classification of fold.

OR

Write a note on joints and their classification.

5. Give the classification of faults.

OR

Write a note on Petrofabroc Analysis.

6. Write a note on Plutons; its role in progressive deformation.

OR

Define the lineation and give their types & relation with major structures.

7. Write an essay on Geodynamic Evolution of 'Himalayas'.