

B. Sc. Second Year Science 2019-2020 GEOLOGY

The examination shall consist of three theory papers and one practical

	Hrs per week	Exam. Hrs.	Marks
A. Theory Papers			
Paper I: Structural Geology	2	3	50
Paper II: Petrology	2	3	50
Paper III: Stratigraphy	2	3	50
B. Practical:	4	4	75
		Total Marks	225

Time: 3 hrs

MM 50

Note: Each paper will be divided into THREE parts.

Part I – Ten questions (short type answer) two from each Unit will be asked. Each question will be of half a mark and the candidates are required to attempt **ALL** questions. **Total - 05 marks**

Part II – Five questions (answer not exceeding 250 words) one from each Unit with internal choice will be asked and the candidates are required to attempt **ALL** questions. Each question will be of 05 marks. **Total 25 marks**

Part III – Four questions may be in parts covering all five Units (answer not exceeding 500 words) will be asked. The candidates are required to attempt any **TWO** questions. Each question will be of 10 marks. **Total 20 marks**

Paper-I: STRUCTURAL GEOLOGY

Time: 3 hrs

MM 50

UNIT-I

Basic concept of structural geology. Concept of strike and dip. Effects of topography on outcrops. Description and applications of clinometer compass. Primary sedimentary structures, their use in determination of top and bottom of beds.

UNIT-II

Folds-Characteristics and their types - Elementary ideas of mechanism of folding; outcrop pattern of non-plunging, plunging, and doubly plunging folds.

UNIT-III

Faults - Characteristics and classification, effects of faults on outcrop, criteria of their recognition in field.

UNIT-IV

Mechanical principles; Stress and strain. Geological examples of strain in rocks. Types of unconformity; their recognition, significance and distinction from faults. Outliers, inliers, overlap and offlap.

UNIT-V

Preliminary ideas of foliation, lineation, and joints. Structures of igneous rocks.