


Name:			
Enrolment No:			
UPES End Semester Examination, December 2024			
Course: Structural Geology Semester: III Program: BSc Geology (H) Course Code: PEGS 2056		Time: 03 hrs. Max. Marks: 100	
Instructions: All questions are compulsory. Internal choice is provided in Section B and Section C. Draw suitable diagram where necessary.			
SECTION A (5Qx4M=20Marks)			
S. No.	Questions	Marks	CO
Q 1	List and briefly describe different types of plate boundaries.	4	CO2
Q 2	Define the term 'dip and strike' and explain its importance in geological mapping.	4	CO2
Q 3	Differentiate between Normal Fault and Reverse Fault	4	CO1
Q 4	Explain why strain ellipses are used in structural geology.	4	CO1
Q 5	Describe dip isogons of a fold with suitable diagram.	4	CO1
SECTION B (4Qx10M= 40 Marks)			
Q 6	Analyze how faulting can impact the natural landscape and provide two examples.	10	CO2
Q 7	Differentiate between anticlines and synclines in terms of fold geometry and features associated with them.	10	CO3
Q 8	Explain different types of foliation with a diagram. OR Illustrate the geomorphological features associated with faulting.	10	CO3
Q 9	Define the concept of shear zone. Explain the role of strain in rock deformation and its transition from brittle fault to ductile shear at depth OR Illustrate the determination of dip and strike of a rock layer in the field. (With suitable example and diagram)	10	CO3
SECTION-C (2Qx20M=40 Marks)			

Q 10	Describe in detail the geometric and genetic classifications of folds. OR Explain the concept of stress and strain in rocks and their significance in deformation.	20	CO4
Q 11	Define different types of strain ellipses with their geological significance. OR Explain the importance of determining the timing of crystallization relative to deformation events in highly deformed rocks.	20	CO4