
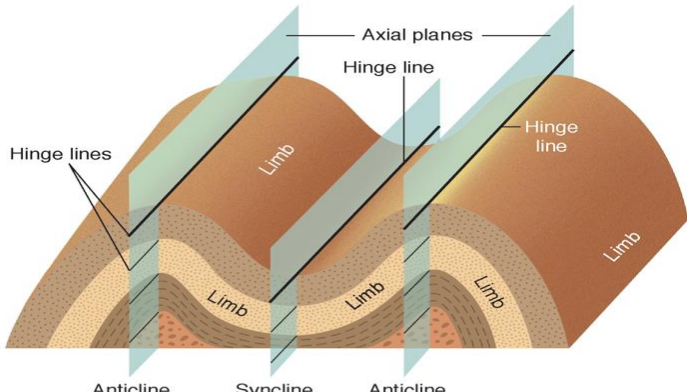


<b>Name:</b>			
<b>Enrolment No:</b>			
<div><div>UPES</div><div>End Semester Examination, May 2025</div><div><div>Course: Introduction to Structural Geology</div><div>Program: B.Sc. Physics</div><div>Course Code: PEGS 2045</div></div><div><div>Semester: IV</div><div>Time : 03 hrs.</div><div>Max. Marks: 100</div></div></div>			
<b>Instructions: Answer all Questions.</b>			
<b>SECTION A</b> <b>(5Qx4M=20Marks)</b>			
S. No.		Marks	CO
Q 1	Define the term ‘Rake’ and ‘Heave’	4	CO1
Q 2	Identify the difference between Hanging wall and footwall	4	CO2
Q 3	Distinguish between apparent dip and true dip	4	CO2
Q 4	Illustrate the axial plane of a fold	4	CO1
Q 5	Describe the Exfoliation joints	4	CO2
<b>SECTION B</b> <b>(4Qx10M= 40 Marks)</b>			
Q 6	Classify the fold using Ramsay classification of fold	10	CO2
Q 7	Explain the term associated with fault. Explain the types of movements along faults and enumerate the criteria for recognizing faults in the field	10	CO3
Q 8	Discuss the genetic classification of lineation	10	CO3
Q 9	Examine the morphology of fold structure and explain the components of fold from give diagram	10	CO3
			

	<p style="text-align: center;"><b>OR</b></p> <p>Construct a rose diagram for bedding planes of given dip direction of <math>12^{\circ}</math>, <math>23^{\circ}</math>, <math>29^{\circ}</math>, <math>56^{\circ}</math>, <math>68^{\circ}</math>, <math>90^{\circ}</math>, <math>102^{\circ}</math>, <math>119^{\circ}</math>, <math>134^{\circ}</math>, <math>156^{\circ}</math>, <math>178^{\circ}</math>, <math>198^{\circ}</math>, <math>245^{\circ}</math>, <math>336^{\circ}</math>, <math>340^{\circ}</math> considering an interval of <math>30^{\circ}</math>.</p>		
<p style="text-align: center;"><b>SECTION-C</b> <b>(2Qx20M=40 Marks)</b></p>			
Q 10	Develop a stepwise process of finding the attitude of fold axis, orientation of axial plane and interlimb angle of a fold on Stereonet. Take a representational attitude of limbs.	<b>20</b>	<b>CO4</b>
Q 11	<p>Evaluate the effect of deformation of rock body due to stress applied using Flinn diagram. Discuss the L, S and LS-tectonics fabric because of deformation</p> <p style="text-align: center;"><b>OR</b></p> <p>Evaluate the effect of topography on structural features and Importance representative factors of the map.</p>	<b>20</b>	<b>CO4</b>