
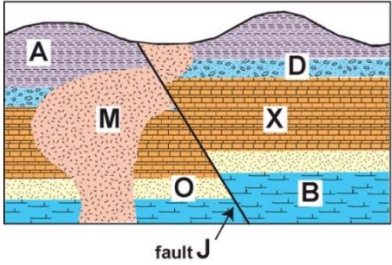
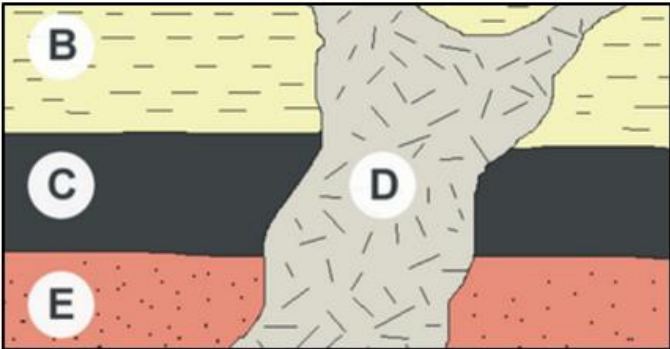


Name:			
Enrolment No:			
UPES Supplementary Examination, December 2023			
Program Name: B.Sc.(Hons.) Geology Course Name: Earth System Science Course Code: PEGS 1001 Nos. of page(s): 02		Semester: I Time : 3 hrs Max. Marks : 100	
Instructions: All Questions are compulsory. In section B, Question No. 6 has internal choice to attempt anyone. Similarly, In section C, Question No.10 has internal choice to attempt anyone.			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q.1	List the four major branches of earth science.	[4 Marks]	CO1
Q.2	Distinguish between meteorites and asteroids.	[4 Marks]	CO1
Q.3	List the layers of atmosphere from bottom to topmost layer.	[4 Marks]	CO2
Q.4	Discuss the first layer of troposphere and its significance.	[4 Marks]	CO2
Q.5	Explain the Big Bang theory for the origin of the universe.	[4 Marks]	CO1
SECTION B (4Qx10M= 40 Marks)			
Q.6	Describe the Nebular hypothesis for the origin of the earth proposed by Kant. OR, Describe the Planetesimal hypothesis for the origin of the earth proposed by Chamberlin & Moulton.	[10 Marks]	CO1
Q.7	Describing the layers of soil profile giving the characteristics of each layer .	[10 Marks]	CO2
Q.8	With suitable diagram, describe the evolution of rift valley.	[10 Marks]	CO3
Q.9	Explain five stratigraphic principles in detail. Supplement your answer with suitable diagrams.	[10 Marks]	CO4

SECTION C
(2Qx20M= 40 Marks)

<p>Q.10</p>	<p>With suitable diagrams, illustrate the plate boundaries outlining the important features that are resulted in each of these boundaries.</p> <p style="text-align: center;">OR,</p> <p>With suitable diagram, illustrate the concept of sea floor spreading highlighting the causes of sea floor spreading.</p>	<p>[20 Marks]</p>	<p>CO3</p>
<p>Q.11</p>	<p>(a) In the figure 11A, Fault J is younger or older than layer A and Give reason for your answer</p> <div style="text-align: center;">  <p>Figure 11 A</p> </div> <p>(b) In figure 11B, Is the layer E older or Younger than layer B ? Also mention that which principle of stratigraphy you have followed for your answer?</p> <div style="text-align: center;">  <p>Figure 11 B</p> </div>	<p>[10+10=20 Marks]</p>	<p>CO4</p>