

বিদ্যাসাগর বিশ্ববিদ্যালয়

VIDYASAGAR UNIVERSITY

B.Sc. Honours Examination 2021

(CBCS)

4th Semester

GEOLOGY

PAPER—SEC2P

Full Marks: 40

Time: 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

PRACTICAL: SEC2AP (STRATIGRAPHY AND STRUCTURE RELATED FIELD)

Group - A

Answer any two questions.

 2×15

- 1. Write the use of clinometer compass in structural geology.
- 2. Write about the different kinds of foliation found in geological field work.

3.	Write	the	method	of	taking	front	bearing	and	back	bearing	of	a	location.
													15

4. Write the process of stereographic projections of structural data. 15

Group - B

Answer any one question.

 1×10

5. Write the criteria for identification of fault in field.

10

6. Write about the shear sense indicative structure present in the sheared rock.

PRACTICAL: SEC2BP (STRATIGRAPHY SEDIMENTOLOGY RELATED FIELD)

Group - A

Answer any two questions.

 2×15

1. Write about the use of toposheet in field study.

- 15
- 2. Write about the different kinds syn-sedimentary deformation structure found in geological field work.
- 3. Discuss about the palaeocurrent indicative sedimentary structures. 15
- **4.** How do you identify palaeo environment by using the sedimentary structure in field?

Group - B

Answer	any	one	question.
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 1×10

- **5.** Write the significance of determining litholog of a sedimentary terrain.
- **6.** Write about the stratigraphic significance of any sedimentary basin in India.

PRACTICAL: SEC2CP (HIMALAYAN GEOLOGY FIELD)

Group - A

Answer any two questions.

 2×15

1. Write about the use of toposheet in field study.

15

- **2.** Write about the different kinds of meta sedimentary structure found in Himalaya.
- **3.** Write the use of clinometer compass in structural geology.
- 4. Discuss about the metamorphic rock sequences found in Himalaya.

15

Group - B

Answer any one question.

 1×10

5. Write the significance of Himalayan orogeny in Indian Stratigraphy.

10

6. Write about the Structural features found in the Himalayan orogenic belt with proper diagram.

PRACTICAL: SEC2DP (ECONOMIC GEOLOGY FIELD)

Group - A

	Answer any two questions.	2×15					
1.	Write about the use of toposheet in field study.	15					
2.	Write about the economic significance of the study area.	15					
3.	What types of methods used in underground mining?	15					
4.	What types of methods used in open cast mining?	15					
Group – B							
	Answer any one question.	1×10					
_		10					
5.	Write the prospecting methods used to locate ore bodies.	10					
6.	Discuss about ore extraction methods with proper example.	10					

PRACTICAL: SEC2EP (VISIT TO ENGINEERING / EXPLORATION GEOLOGY PROJECT SITES)

Group – A

			Answe	er any <i>two</i>	questio	ns.				2×	15
1.	Write ab	out the	use of c	elinometer ir	n field	stu	dy.				15
2.	Write ab	out the	different	exploration	stages	to	explore	an	ore	body.	15

3.	What types of methods used in underground mining?	15
4.	What types of methods used in open cast mining?	15
5.	Write the prospecting methods used to locate ore bodies.	10
6.	Discuss about different types of drilling techniques.	10
	Group – B	
	Answer any <i>one</i> question.	×10
5.	Write the significance of Himalayan orogeny in Indian Stratigraphy	10
6.	Write about the Structural features found in the Himalayan orogenic with proper diagram.	bel 10