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UG/5th Sem/GEOLO(H)/Pr/19

2019

B.Sc. (Honours)

5th Semester Examination

**GEOLOGY**

Paper - DSE 1P

(Practical)

Full Marks : 20

Time : 3 Hours

*The figures in the margin indicate full marks.  
Candidates are required to give their answers  
in their own words as far as practicable.*

**Set - 1**

**Introduction to Geophysics**

Answer the following questions :

1. Plot the data in the table, find the fault plain solutions and deduce what type of fault was involved.

[ Turn Over ]

( 2 )

Azimuth	Take off angle	Sense
0	18	D
34	27	C
45	19	C
58	29	C
94	17	C
123	28	D
153	46	D
202	15	D
230	31	D
238	29	D
247	55	C
270	19	C
311	16	C
329	46	D

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2. A large area of continent consisting of 30 km of crust with average density  $2.8 \text{ Mg/m}^3$  and over 90 km of material density  $3.1 \text{ Mg/m}^3$  is covered with ice (density  $0.9 \text{ Mg/m}^3$ ) 1.6 km thick and is in isostatic equilibrium. Then the ice melts. By how much has the rock surface of the continent changed

( 3 )

when equilibrium has been regained ? (The density of the asthenosphere is  $3.2 \text{ Mg/m}^3$ ). 5

3. Interpret the section given using kink axial surfaces and if you identify any growth strata, indicate at what level growth initiated. Is the structure is still active ? (Section attached) 5
4. Laboratory Note Book. 2
5. Viva voce. 3

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*[ Turn Over ]*

( 4 )

Set - 2

**Earth and Climate**

**(Practical)**

Full Marks : 20

Time : 3 Hours

Answer the following questions :

1. Show the distribution of major climatic regimes of India on a given map. 5
  2. Show the distribution of major wind patterns on world map. 5
  3. Prepare a paleogeographic maps of India during eocene and miocene time intervals. 5
  4. Laboratory Note Book. 2
  5. Viva voce. 3
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