

B.Sc. 5th Semester (Honours) Examination, 2020 (CBCS)

Subject: Geology

Paper: DSE-2

(Introduction to Geophysics)

Time: 2 hours

Full Marks: 40

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

1. Answer any eight of the following questions.

8x5=40

- (a) Write about elevation correction needed for gravity method of prospecting.
- (b) What is drift correction in gravity method of prospecting?
- (c) What will be the nature of gravity anomaly curve over a salt dome with cap rock? Explain with neat sketch.
- (d) How magnetic method of geophysical prospecting is used in mineral exploration?
- (e) Briefly describe the principle of resistivity method.
- (f) Write about different field procedures employed in resistivity method.
- (g) What are the different components of earth's magnetic field at a given place and time? Among these which one is of our interest in magnetic method of geophysical prospecting?
- (h) How depth of the interface between two horizontal layers can be calculated from critical distance.
- (i) How can the average velocity of seismic waves through the ground be determined by 'well shooting' method?
- (j) 'Most of the interpretation of magnetic data are qualitative rather than quantitative in nature' – Justify.