

5 SEM TDC GEO M 7

2017

(November)

GEOLOGY

(Major)

Course : 507

(**Surveying and Field Mapping**)

Full Marks : 48

Pass Marks : 19/14

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

UNIT—17.1

(**Surveying**)

(Marks : 24)

1. Write notes on any *two* of the following : $4 \times 2 = 8$
 - (a) Principles of surveying
 - (b) Chain surveying
 - (c) Levelling

2. Write about different methods of plane table surveying.

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3. Discuss about any *two* of the following :

4×2=8

(a) Triangulation and traversing

(b) Importance of surveying in geological studies

(c) Linear and angular measurements

4. Choose the correct option/Answer the following :

1+1=2

(a) Which of the following methods gives more accurate measurement of distance?

(i) Pacing

(ii) Odometer

(iii) Tape

(b) In which method of plane table surveying, all surveyed stations must be accessible as well as visible?

UNIT—17.2

(**Field Mapping**)

(Marks : 24)

5. Write notes on any *two* of the following : $4 \times 2 = 8$

(a) Importance of field studies

(b) Types of geological mapping

(c) Calculation of stratigraphic thickness

6. Describe about different observations and recordings to be made during a geological field study. 6

7. Answer any *two* of the following : $4 \times 2 = 8$

(a) Write about the salient features of a geological field report.

(b) What is a base map? Write about its types and importance.

(c) Write a note on the use of Brunton compass in the field studies.

8. Choose the correct answer /Write Yes or No of the following : 1+1=2

(a) If geographical direction is marked on a rock sample before its collection, it is known as

- (i) bulk sample
- (ii) oriented sample
- (iii) grab sample

(b) To measure the dip and strike of a planar structure, the clinometer must be in contact with the plane.
