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5 SEM TDC GEO M 7

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(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) Surveying and its types
 - (b) Triangulation and traversing
 - (c) Whole-circle bearing and quadrantal bearing

2. Describe plane table or compass survey methods. 5
3. Write notes on any *two* of the following : 4×2=8
- (a) Chain surveying
 - (b) Importance of surveying in geological studies
 - (c) Basic principles of surveying
4. Answer the following : 1+1+1/2+1/2=3
- (a) What is pacing?
 - (b) What is levelling?
 - (c) Convert 170° into quadrantal bearing.
 - (d) Write the angular difference between back bearing and fore bearing.

UNIT—17.2

(Field Mapping)

(Marks : 24)

5. Write short notes on any *two* of the following : 4×2=8
- (a) Recording and plotting of geological data on base map

(b) Types of geological maps

(c) Clinometer compass and its use

6. Describe the methods of construction of geological cross-section. 5
7. Describe the methods of calculation of stratigraphic thickness. 5

Or

Write on the preparation of a geological field report using field data.

8. What is an outcrop? 1
9. What is mapping? What are the techniques employed during geological mapping in a terrain consisting of sedimentary rock exposures? 1+4=5
