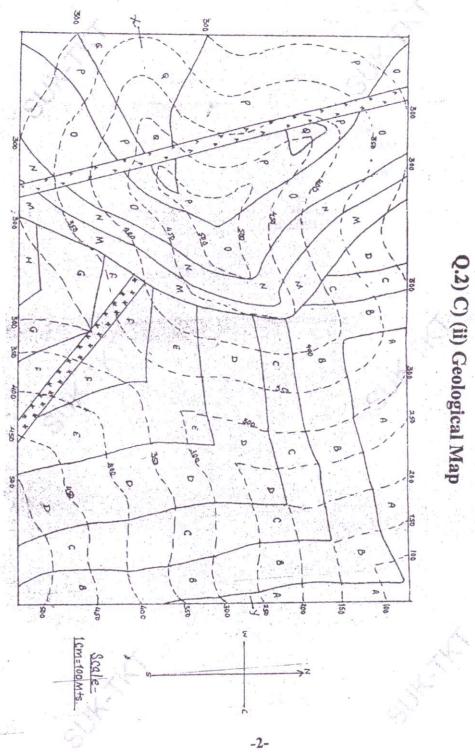
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## T.E.(Civil) (Semester-VI) (New Course) Examination, May - 2017

ENGINEERING GEOLOGY Sub. Code: 66876 Day and Date: Tuesday, 04-05-2017 Total Marks: 100 Time: 2.00 p.m. to 5.00 p.m. Instructions: 1) All questions are compulsory. Answer to the two sections must be written in one and same answer book. 3) Black figures to the right indicate full marks. **SECTION-I** O1) Attempt any two of the following. Describe various processes involved in the geological work of river with respect to erosion. What is meant by Sedimentary rock? Give grainsize classification of b) sedimentary rocks. Mention one rock from each group. [9] Define fault. Describe with the help of neat sketches fault line, strike of fault, dip of fault, hade of fault and downthrow of fault. Explain in brief Civil Engineering significance of faulting. [9] Q2) Answer any two of the following. What do you understand by the term Igneous rock? State with the neat sketches the meaning of the term of Plutonic, Hypabasal & Volcanic Rocks. Give suitable examples. [8] b) Explain in brief various processes of physical weathering. [8] c) Write a brief account of [8] Anticlinal fold and Angular unconformity i) Topography of given geological map. Q3) Write short notes on: [16] Scope of Engineering Geology a) b) Products of volcanoes c) Laccolith Agents of metamorphism d) P.T.O.



## **SECTION-II**

- Q4) Attempt any two of the following.
  - a) What do you mean by Reservoir Induced Seismicity? Discuss in detail the theories of RIS. [9]
  - b) Discuss in detail the role geological conditions that influence the design, cost & stability of tunnel. [9]
  - c) With the help of neat sketches describe the different types of dam. What are the forces acting on the dam? [9]
- Q5) Attempt any two of the following.
  - a) What are the various types of landslides? Describe in detail the preventive measures of landslides. [8]
  - b) Data obtained from a drill hole at foundation site is as follows, [8]
    - i) Bore hole started at Top R.L: 375 m.
    - ii) Bore hole ends at R.L: 325m.
    - iii) Length of each piece of core recorded between 369 m to 366 m is as follows, 12,14,22,13,16,18,15,8,9,17,15,20,14,22,16,18,20,17. All piece lengths are in cm.
    - Find out: i) Total length of core recovered.
      - ii) Core recovery.
      - iii) Core loss.
      - iv) ROD.
  - What are the types of aquifers? Explain in detail the zones of ground water.
- Q6) Write short notes on.

[16]

- a) Seismograph.
- b) Requirement of good building stones.
- c) Observations during drilling.
- d) Dams on folded strata.

