

3E1623

Roll No.

3E1623

Total No. of Pages : 3

B. Tech. (Sem. III) (Main/Back) Examination, December - 2017
Civil Engg.
3CE3A Engg. Geology

Time : 3 Hours

Maximum Marks : 80
Min. Passing Marks : 26

Attempt any five questions, selecting one question from each unit.
All Questions carry equal marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used / calculated must be stated clearly.

Use of following supporting material is permitted during examination.
(Mentioned in form No. 205)

1. _____ Nil _____ 2. _____ Nil _____

UNIT - I

1 Distinguish between weathering and Erosion and describe in brief various agents of weathering.

16

OR

1 Write short notes on any two of the following :

(i) Features formed by wind deposits.

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(ii) Features formed by river erosion.

8

(iii) Various Physical properties of minerals.

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UNIT - II

- 2 Describe in brief about the various geological and engineering properties of Rocks that are important in selection of rocks.
- (a) As building material
(b) As road aggregates.

8+8=16

OR

- 2 Write short notes on any two of the following :
- (i) Mineralogical classification of igneous rocks.
(ii) Structures of sedimentary rocks.
(iii) Agents of Metamorphism.

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UNIT - III

- 3 Distinguish between joints and Faults. Write in brief about the classification of faults and illustrate your answer with diagrams.

2+14=16

OR

- 3 Write short notes on any two of the following :
- (i) Define unconformity and describe different types of unconformities.

2+6=8

- (ii) Describe various types of joints.

- (iii) How are faults recognised in the field ?

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UNIT - IV

- 4 Describe in brief about the various geological, geophysical and other investigations which need to be carried out in selection of a site for dam and Reservoir. 16

OR

- 4 Describe in brief geophysical electrical resistivity methods and their uses in Civil engineering. 16

UNIT - V

- 5 Define remote sensing and describe advantages and limitation of remote sensing and G.I.S. in different fields of civil engineering. 2+7+7=16

OR

- 5 Write short notes on any two of the following :
- (i) Describe in brief about the different types of platforms used in remote sensing. 8
- (ii) Define sensors and write in brief about the characteristics of sensors. 2+6=8
- (iii) Describe in brief E.M.R. and Electromagnetic spectrum. 4+4=8