Seat No.	

[5459]-109

S.E. (Civil Engineering) (Second Semester) EXAMINATION, 2018

ENGINEERING GEOLOGY

(2015 PATTERN)

Time : Two Hours　　　　　　　　　　**Maximum Marks : 50**

N.B. :— (i) Solve/Write the answers to any *four* questions in single answer book only.

　　　(ii) Neat diagrams must be drawn wherever necessary.

　　　(iii) Figures to the right indicate full marks.

　　　(iv) Assume suitable data, if necessary.

1. (a) Enlist important rock forming MINERAL families. Describe in detail 'FELSPAR' family. [6]

　　(b) What is 'DYNAMOTHERMAL' Metamorphism ? Describe *two* textural changes developed due to 'DYNAMOTHERMAL' Metamorphism. [6]

Or

2. (a) Describe the process of formation of SEDIMENTARY rocks. [6]

　　(b) Write a note on OROGENIC and EPIROGENIC Mountains. [6]

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3. (*a*) Describe any *two* features developed by 'REJUVENATION' of river. [6]

(*b*) What are general principles of Stratigraphy ? Explain the importance of 'Faunal Succession'. [6]

Or

4. (*a*) Why is 'Gondwana' formation important in the study of Stratigraphy ? [6]

(*b*) Which fundamental structures are studied in 'Structural Geology' ? Write engineering significance of JOINTS present in Compact Basalt. [6]

5. (*a*) Describe the LIMITATIONS of drilling method in Preliminary Geological Exploration. [7]

(*b*) Make a distinction between the foundation of dam on : [6]

(*i*) Anticline

(*ii*) Syncline.

Or

6. (*a*) Describe favourable and unfavourable geological conditions for the STABILITY OF HILL SLOPES. Draw neat diagrams. [7]

(*b*) Explain feasibility of TUNNEL alignment across a 'FAULT PLANE'. [6]

7. (*a*) What are the requirements of good Building Stone ? Explain any *three* requirements. [7]

(*b*) What exploration is needed in the reservoir site of proposed DAM ? [6]

Or

8. (*a*) What is ARTESIAN condition ? Describe geological conditions favorable for the formation of ARTESIAN wells. [7]

(*b*) Write a note on application of Remote Sensing in Engineering Geology. [6]