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]

P.T.O.

3.	(a)	Describe any two features developed by 'REJUVENATION' of	f
		river.	;]
	(<i>b</i>)	What are general principles of Stratigraphy? Explain th	e
		importance of 'Faunal Succession'.	;]

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.
- 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

- (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]