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**[5152]-510****S.E. (Civil Engineering) (Second Semester)****EXAMINATION, 2017****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) How are sedimentary rocks formed ? Explain types of sedimentary deposits with examples. [6]

(b) Write note on INTERIOR of THE EARTH. [6]

*Or*

2. (a) What is Metamorphism ? Describe GNEISSOSE and SCHISTOSE texture with neat sketches. [6]

(b) What are CLASTIC and NONCLASTIC secondary rocks ? Describe CLASTIC texture with neat diagram. [6]

3. (a) Describe any *three* features developed by RIVER deposition. [6]

(b) Why are observations and precautions necessary in the core drilling process ? [6]

P.T.O.

Or

4. (a) Write note on ARCHEANS and DHARWARS. [6]  
 (b) How can nature of the rocks be assessed on number of pieces present in one RUN ? [6]
5. (a) Describe any *two* geological conditions leading to natural springs ? [7]  
 (b) Write note on feasibility of TUNNELLING through : [6]  
 (i) Anticline  
 (ii) Syncline.

Or

6. (a) Explain with appropriate example feasibility of dam alignment across a DYKE. [7]  
 (b) What is seismology ? Explain various seismic waves. Describe CIRCUMPACIFIC RING OF FIRE. [6]
7. (a) What are Natural and Artificial causes of Landslides ? Enlist measures to prevent landslide. [7]  
 (b) What Geological studies are required to be carried out in reservoir area of proposed dam site ? [6]

Or

8. (a) What are CORE RECOVERY and RQD ? On the basis of the further logging data calculate core recovery and RQD. [7]

Run in meters	Piece No.	Length of each piece in 'cm'	Nature of fracture at lower end	Remark
	1	09	M	Basaltic rocks
	2	10	J	
	3	09	M	
	4	40	J	
	5	20	J	
	6	34	J	
	7	55	J	
	8	42	J	
	9	50	J	
	10	31	J	

(b) Describe feasibility of dam in folded areas. Draw neat diagrams. [6]