Total No. of Questions—8]

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Seat	
No.	7.7

[5152]-110

## S.E. (Civil Engineering) (Second Semester)

## **EXAMINATION, 2017**

## ENGINEERING GEOLOGY

## (2012 **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) Distinguish between Conglomerate and Breccias. How do they form in nature? [6]
  - (b) What is Unconformity? Enlist types of Unconformities. Describe any one with neat diagram. [6]

Or

- 2. (a) What is Metamorphism? Make distinction between two parallel textures represented by metamorphic rocks. [6]
  - (b) Differentiate between Fracture and Fault? Explain Reverse Fault. [6]

P.T.O.

3.	(a)	Describe depositional work done by River. [6]			
	<i>(b)</i>	Inscribe importance of Core Drilling? What are the limitations			
		of drilling ? [6]			
		Or Or			
4.	(a)	What are principles of stratigraphy? Explain in detail any			
		two principles. [6]			
	( <i>b</i> )	Write a note on importance of observation during drilling			
		process. [6]			
<b>5.</b>	(a)	Describe any Two geological conditions leading to Artesian			
	Jr.	well ? [7]			
	( <i>b</i> )	Write note on feasibility of Tunnelling through: [6]			
		(i) Compact Basalt			
		(ii) Amygdaloidal Basalt			
		or			
6.	(a)	Explain with appropriate example about feasibility of dam			
alignment across a Dyke.					
	<i>(b)</i>	Describe Earthquake Waves and their characteristics with			
		diagrams. [6]			
7.	(a)	What is soil creep? What is Rock fall? Explain natural and			
		artificial causes of Landslides. [7]			
	<i>(b)</i>	Describe feasibility of dam in folded areas. Draw neat			
		diagrams. [6]			

8. What are Core Recovery and RQD? On the basis of the (a)following data calculate core recovery and RQD: [7]

Run in	Piece	Length of each	Nature of fracture	Remark
meters	no.	piece in 'cm'	at lower end	
3 m to 6 m	150	10	M	Basaltic
	2	09	J	rocks
	3	09	M	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4	30	15	
K. K.	5	34	J	
~	6	51	J W. J	
	7	55	7	
	8	60	J	
	9	42	J	

area of Elaborate Geological studies to be carried in reservoir area of (*b*) dam.