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MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL

A Constituent Institution of Manipal University

III SEMESTER B.TECH. (CIVIL ENGINEERING)
END SEMESTER EXAMINATIONS, NOV/DEC 2017
SUBJECT: ENGINEERING GEOLOGY [CIE 2105]
REVISED CREDIT SYSTEM
(MAKE-UP EXAM)

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- ❖ Answer **ALL** the questions.
- ❖ Missing data may be suitably assumed.
- ❖ Draw neat sketches wherever necessary

Q.No	Questions	Marks	CO
1A.	What are the physical properties used in the identification of minerals? Explain fracture and cleavage.	6	1
1B.	Describe some important differences between oceanic crust and continental crust.	4	1
2A.	Explain the different types of textures seen in igneous rocks.	5	1
2B.	Describe the different type of structures seen in sedimentary rocks.	5	1
3A.	What are the different crystal systems? Explain the Orthorhombic crystal system with suitable examples.	5	1
3B.	Explain the different layers of a soil profile. What are the important factors resulting in soil formation?	5	2
4A.	What is water quality? Explain the reasons for groundwater contamination.	4	3
4B.	Explain in detail the different stages of a river system.	4	2
4C	Write a short note on Mural joints	2	3
5A.	What are the preliminary and detailed surveys that a civil engineer must undertake before construction of a tunnel?	4	4
5B.	Differentiate between the red and black soils of India on the basis of their rock types, occurrence and chemical properties.	4	2
5C.	Write a short note on Slickensides.	2	3