

Reg. No.



MANIPAL INSTITUTE OF TECHNOLOGY

MANIPAL

A Constituent Institution of Manipal University

III SEMESTER B.TECH. (CIVIL ENGINEERING) END SEMESTER EXAMINATIONS, NOV/DEC 2016

SUBJECT: ENGINEERING GEOLOGY [CIE 2105]

REVISED CREDIT SYSTEM

(06/12/2016)

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- ❖ Answer **ALL** the questions.
- ❖ Missing data may be suitable assumed.

Q.No	Questions	Marks	CO
1A.	Define a Mineral and give the classification of mineral groups? Explain in detail the silicates, native elements and halide group of minerals	5	1
1B.	Explain the Earth's internal structure with respect to its chemical and physical composition.	3	2
1C.	Write a short note on Ore deposits	2	1
2A.	Write short notes on the following (2 marks each): 1. Columnar Jointing 2. Slickensides 3. Ptygmatic Folding	6	3
2B.	Write a short note on Tsunami	2	2
2C.	Differentiate between a Granite and a Basalt rock	2	1,6
3A.	What is Geological timescale? Explain briefly about the Paleozoic Era.	4	1
3B.	With the help of a neat diagram, explain what is a Horst and a Graben.	3	2,3
3C.	Explain the three types of Metamorphism	3	2,3
4A.	Why is Crystallography important in Geosciences? Explain the Monoclinic crystal system.	4	2
4B.	What are Aquifers? Explain in detail the causes of sea-water intrusion	4	3
4C.	What are Convergent and Divergent plate boundaries?	2	2
5A.	What are the geological considerations to be taken for the construction of a dam?	4	4
5B.	What is Remote Sensing? Explain how it is useful for different applications	4	5
5C.	Define Dip and Strike with the help of a diagram.	2	3