

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**

**End Semester Examination – Winter 2018**

**Course: B. Tech in Civil Engineering**

**Semester: III**

**Subject Name: Engineering Geology**

**Subject Code: BTCVC306**

**Max Marks:60**

**Date: 12/12/2018**

**Duration: 3 Hr.**

**Instructions to the Students:**

1. Solve **ANY FIVE** questions out of the following.
2. The level question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.
3. Illustrate your answers with neat sketches, diagrams etc. where ever necessary.
4. Assume suitable data wherever necessary and mention it clearly.

	(Level/CO)	Marks
<b>Q. 1 All questions are compulsory.</b>		<b>12</b>
A) Write a note on interior of the earth with neat labeled diagram.	(CO 1)	
B) Explain types of volcanoes and its products.	(CO 4)	
C) Write note on type of transportation by wind.	(CO 1)	
E) Define various varieties of quartz group of mineral.	(CO 2)	
F) Using diagram explain the term Meandering.	(CO 1)	
G) Applications of geology in civil engineering.	(CO 4)	
<b>Q.2 Solve any Four of the following.</b>		<b>12</b>
A) What are the clastic and non-clastic sedimentary rocks and their structures?	(CO 2)	
C) Write in detail on the following properties of minerals with examples. (i) Specific gravity (ii) Hardness (iii) Luster (iv) Cleavage	(CO 2)	
D) Describe in brief about importance of clay minerals and their use in modern industries.	(CO 2)	
E) Bring out the differences between dykes and sill with diagram.	(CO 2)	
F) Give short notes on types of mountains with suitable examples.	(CO 1)	
<b>Q. 3 Solve any Three of the following.</b>		<b>12</b>
A) Define fold and describe classification of folds with neat labeled diagrams.	(CO 3)	
B) Describe various parts of fault and its following types with labeled diagram (i) Gravity fault (ii) Reverse fault (iii) Strike slip fault	(CO 3)	
C) Explain in detail different type of unconformities with labeled diagram.	(CO 3)	
D) Define and describe joints and classification with its role in civil engineering.	(CO 3)	

**Q.4 Solve any Three of the following.**

**12**

- A) What are the factors generally considered by an engineer while deciding use of stone in construction jobs? (CO 2)
- B) What are the types of Aquifer with neat labeled diagram? (CO 1)
- C) Explain various dressing methods of building stones. (CO 2)
- D) What is ground water? Describe the various zones of ground water. (CO 4)

**Q. 5 Solve any Two of the following.**

**12**

- A) Explain electric resistivity method with following configurations: (CO 4)  
(i) Wenner configurations (ii) Schlumberger configurations.
- B) Give details of importance of geological structures for reservoir site. (CO 4)
- C) Illustrate important geological requirements considered in the selection of a dam site. (CO 4)

**Q. 6 Solve any Two of the following.**

**12**

- A) Describe procedure of measurement and calculation of Rock Quality Designation (RQD) and its uses in construction. (CO 3)
- B) Describe various types of drilling techniques in detail. (CO 4)
- C) Write a note on objectives of preliminary geological survey in civil engineering structures. (CO 4)

**\*\*\* End \*\*\***