

Student ID

JK Lakshmipat University, Jaipur
Institute of Engineering and Technology
End Term Examination

B.Tech.[2ndYear]/ [III Semester]/ [Academic Year 2013-14]



Course Name: Engineering Geology

Max Marks: 40

Course Code: CE 304

Time: 03.00 hr

Instructions:

1. Paper contains three sections .Attempt all sections.
2. Read the instructions carefully before attempting each section.

Section A

(10 Marks)

Attempt all parts from section A. Part (a) of 5 marks, each of 1 mark and part (b) of 5 marks, each of 2.5 marks.

Q.1 (a) (I) Mesosphere zone of atmosphere starts at about km above the surface and continue up to height of km.

(II) The inclination of a layer of rock with a horizontal plane is known as.....

(III) The direction in an anisotropic substance in which there is no double refraction is called.....

(IV) Write the name of two key words (processes) important for faulting in rocks.

(V) Hardness (H) is equal to 1 (softest) is defined for which standard mineral on Mohs' scale ?

Q.1 (b) (I) Define the term Scree deposit and Talus slope.

(II) Write short note on Eluvium and Deluvium

Section B

(20 Marks)

Attempt any four out of five questions. Each question carries equal marks.

Q. 2 Explain the class of rocks that are known to cover 75 % of surface area of earth and also classify them in detail.

Q.3 what are the Aeolian deposits? Explain in detail with example.

Q.4 Suppose you have a sample of mineral than describe the terms associated with minerals based on splitting or plane of broken surfaces that you have observed in given mineral sample.

Q.5 Explain the property of minerals in detail that describes the behavior of mineral under deformation?

Q.6 How winds are born? Explain at least three methods by which wind performs the work of erosion.

Section C

(10 Marks)

Q.7 Describe the structural features of rocks that are responsible for failure in earth crust?

OR

(7 Marks)

What is chemical weathering? Describe the main processes of chemical weathering in detail.

Q.8 If you are site engineer for a proposed tunnel project and there are folds in the area of work. Then what will be the engineering considerations that you will take before starting the proposed tunnel project. ?

(3 Marks)