Total No. of Questions :5] *[Total No. of Printed Pages :2*

Roll No .....

CE - 304

B.E. III Semester

Examination, June 2015

Engineering Geology

Time : Three Hours

Maximum Marks : 70

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each questions are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

1. a) Define the term origin of the earth.
   b) What do you understand by crust of the earth?
   c) Write down the short notes on geological classification of soil.
   d) Explain internal structure of the earth with the help of neat sketch.

   OR

   Write down the detail notes on geological investigation in engineering practice.

2. a) Explain crystal and crystallographic system.
   b) What is rock forming minerals?
   c) Write down the short notes on formation of minerals in nature.
   d) Explain in detail salient features of crystallographic system.

   OR

   Write down the composition, atomic structure and classification of silicate group of minerals.

www.rgpvonline.com

3. a) What do you understand by magma?
   b) Write down the name of various igneous rocks.
   c) What do you understand by texture and structure of the rocks?
   d) What do you understand by structure of the sedimentary rocks? How these are related to Environment of formation of sedimentary rocks?

   OR

   Explain the term metamorphic as applied in rocks. Enumerate the various agents of metamorphism and explain their role.

4. a) Explain the following term :
      i) Dip
      ii) Strike
   b) What is the folds?
   c) Explain the various parts of the folds with neat sketch.
   d) Explain the causes of joints in rocks; also mention their defects on construction work.

   OR

   How folds are classified? Explain various types of folds on the basis of inclination of axial plain with suitable sketch.

5. a) What do you understand by stability of hill sides?
   b) Explain the term water table.
   c) What are the requirements of geological mapping?
   d) Write down the structural features of the dam site.

   OR

   Discuss the geological features affecting water problems in tunnelling operation.

******