

B.E. DEGREE EXAMINATIONS: APRIL / MAY 2010

Third Semester

CIVIL ENGINEERING

U07AG302: Applied Geology

Time: Three Hours

Maximum Marks: 100

Answer ALL Questions:-

PART A (10 x 1 = 10 Marks)

1. The middle layer of the crust is composed of
A. SIAL B. SIMA C. NIFE D. MGFE
2. Which of the following is the landform created by wind
A. Flood plains B. Drainage basin
C. Barchans D. Canyons
3. The tendency of the mineral to break along certain definite direction is called
A. Lustre B. Tenacity C. Fracture D. Cleavage
4. Which of the following mineral crystallizing in the normal class of Hexagonal system
A. Zircon B. Beryl C. Magnetite D. Orthoclase
5. When the majority of the crystals are in euhedral form, then the fabric of the rock is termed as
A. Allotriomorphic B. Panidiomorphic
C. Hypidiomorphic D. Directive texture
6. Which one of the following is the type of sedimentary structures
A. Columnar Joints B. Gneissose structure
C. Ripple marks D. Rift and grain
7. Joint sets strikes parallel to the strike of the rocks is known as
A. Strike Joints B. Dip Joints
C. Oblique Joints D. Shear Joints
8. Folds in which the limbs are unequal in length and dip unequally on either side is termed as
A. Symmetrical folds B. Asymmetrical folds
C. Box folds D. Chevron fold

(OR)

(b) Discuss in detail, the axial character, Symmetry elements, and forms present in the normal class of Tetragonal system. Name at least three minerals crystallizing in this system.

23. (a) (i) Enumerate the various textures found in Igneous rocks. Explain in detail (7)
(ii) List out the various forms of igneous rocks. Explain in detail. (7)

(OR)

(b) Write down the mineral composition, texture, structure, types, Engineering properties and uses of the following rocks

- i) Granite ii) Quartzite iii) Sandstone iv) Slate

24. (a) What are faults? How are they classified? Discuss in detail, the effects of faulting on various Civil Engineering projects.

(OR)

(b) Discuss the various causes of folding. Add a note on their Engineering significance.

25. (a) Discuss in detail, the geological investigations of a Dam site.

(OR)

(b) Discuss briefly, the various types of landslides. Mention its causes and preventive measures.
