

Code No: V3104

R07

Set No: 1

III B.Tech. I Semester Supplementary Examinations, November/December - 2012

ENGINEERING GEOLOGY

(Civil Engineering)

Time: 3 Hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. a) Define the term River. What are the geological agents of Rivers?
b) Explain the types of development of rivers and valley.
2. Write the physical properties crystal system, chemical composition and uses of following minerals.
a) Feldspars & types b) Chlorite c) pyrite d) calcite
3. Explain the common structures, textures of metamorphic rocks with sketches and give their classification.
4. Write the following:
a) Radial, en echelon, peripheral, step & parallel faults.
b) Shear joints, longitudinal joints, types of joints in rocks.
5. What is meant by earth quake? Give their classification and causes of earthquakes.
6. Write the principle, controlling factors of Radiometric and Geothermal Method.
7. What are the purposes of Dams? Explain the influence of rock types at the selection of Dam constructions
8. Explain the importance of Rock types and groundwater conditions for successful tunneling.

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R07

Set No: 2

III B.Tech. I Semester Supplementary Examinations, November/December - 2012

ENGINEERING GEOLOGY

(Civil Engineering)

Time: 3 Hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. What are the Branches of geology? Explain
2. Write the physical properties crystal system, chemical composition and uses of following minerals.
a) hornblende b) Augite c) pyrolusite d) pyrite
3. Explain the megascopic identification and types of following rocks.
a) Gneiss b) schist c) quartzite d) marble e) slate f) khondalite
4. What are the parts of unconformities? Give their types with sketches and the role of importance in civil engineering.
5. Explain the profiling, scope of profiling, field procedure and interpretation of profiling data of electrical investigations.
6. Write the following:
a) Define the terms of earthquake and their endogenous geological agents.
b) Earthquake terminology.
7. Explain the bearing of litho logy, structures and ground water conditions Influencing the selection of reservoir.
8. What is Over break? Give their importance for influence of rock types.

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Set No: 3

III B.Tech. I Semester Supplementary Examinations, November/December - 2012

ENGINEERING GEOLOGY

(Civil Engineering)

Time: 3 Hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. Describe the processes of Weathering of Rocks and give their importance in civil engineering constructions.
2. Write the physical properties crystal system, chemical composition and uses of following minerals.
a) Magnetite b) Talc c) Galena d) Olivene
3. Describe the various forms of igneous rocks with sketches.
4. Explain the following:
(a) Axis, Axial plane, crest, limb, trough etc., with sketches.
(b) Fault plane, foot wall, hanging wall, slip, hinge etc., with sketches.
(c) Master joints, joint sets, closed joints etc.,
5. Explain the ground water exploration techniques of geological, geophysical and hydrological investigations.
6. Write the principle, controlling factors of Radiometric and Geothermal Method.
7. Explain the Capacity of reservoir, effect of evaporation, Water tightness and influence of rock types.
8. What are the geological considerations for successful tunneling? Write briefly.

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Set No: 4

III B.Tech. I Semester Supplementary Examinations, November/December - 2012

ENGINEERING GEOLOGY

(Civil Engineering)

Time: 3 Hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. Define the term geology. Explain the importance with reference to structures .
2. Write the physical properties crystal system, chemical composition and uses of following minerals.
a) Gypsum b) Barite c) Hematite d) Bauxite
3. Define the term rock. Give their classification and importance in civil engineering
4. Write the following:
a) Anticline, syncline, similar , parallel ,over turned, drag, recumbent folds
b) Gravity ,thrust ,dextral ,rotational, hinge, strike ,dip, oblique faults with sketches
5. Explain the Types of aquifers and fluctuation of the water table level in unconfined aquifers.
6. What are the geological factors are influencing seismic wave velocities? Give their composition, compaction and saturation of travel time curves, natural of seismic refraction studies.
7. Explain the influence of geological structures and their scope of preventive leakage with sketches.
8. Write the following:
a) lining of tunnels b) purposes of tunnels c) Over break
