

Code No: R22015

R10**SET - 1**

II B. Tech II Semester Supplementary Examinations Dec – 2012
ENGINEERING GEOLOGY
(Civil Engineering)

Time: 3 hours

Max. Marks: 75

Answer any **FIVE** Questions
All Questions carry **Equal** Marks

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1. What is engineering geology? What are the effects of weathering with reference to dams and reservoir?
2. What is mineral? Explain the various physical properties of mineral responsible for identification in the field.
3. What is metamorphism? Agents of metamorphism and textures & structures of metamorphic rocks.
4. Write an essay on faults with neat sketches? How they are important in civil engineering constructions.
5. Write a short note on
  - a) Earth quakes and their causes and effects.
  - b) Landslides their causes and effects.
6. What is the importance of geophysical investigations? Explain and resistivity method.
7. Explain about the geological consideration for the selection of a dam site.
8. Describe with neat sketches the ideal geological conditions for the alignment of a tunnel.

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**R10****SET - 2****II B. Tech II Semester Supplementary Examinations Dec – 2012****ENGINEERING GEOLOGY**

(Civil Engineering)

Time: 3 hours

Max. Marks: 75

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Answer any **FIVE** Questions  
All Questions carry **Equal** Marks

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1. What is Geology? Explain the importance of Geology in civil engineering constructions?
2. Define mineral? Describe physical and chemical properties of given minerals.
 - a) Quartz
 - b) Orthoclase feldspar
 - c) Talc
 - d) Muscovite mica
3. What are primary rocks? How they are formed? Describe texture and structures of primary rocks.
4. How do you distinguish a fault from a joint? Describe with illustrations the different types of faults, how you recognize them in the field.
5. What is ground water; explain various types of water formations? Describe cone of depression.
6. How do you evaluate the sub surface analysis using Electrical resistivity methods? Add a note on interpretation techniques of geophysical methods.
7. Explain the abutment problem in Arch dam.
8. Describe the over break in tunneling.

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R10**SET - 3****II B. Tech II Semester Supplementary Examinations Dec – 2012****ENGINEERING GEOLOGY**

(Civil Engineering)

Time: 3 hours

Max. Marks: 75

Answer any **FIVE** Questions
All Questions carry **Equal** Marks

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1. Describe weathering? Add a note on agents of weathering and their effects on rocks.
2. Write an essay on different physical properties of minerals and mention some of the economic minerals.
3. What is rock? What are sedimentary rocks? How do you classify them?
4. What are folds? Explain with diagrams and their significance in civil engineering construction.
5. Describe fully the causes and effects of landslides. Add note on the integration of landslides.
6. Write an essay on geophysical methods and their importance in civil engineering.
7. What are the effects of dams and reservoirs give Indian examples.
8. What is tunnel? Explain the effects of tunneling on the ground?

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**R10****SET - 4****II B. Tech II Semester Supplementary Examinations Dec – 2012****ENGINEERING GEOLOGY**

(Civil Engineering)

Time: 3 hours

Max. Marks: 75

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Answer any **FIVE** Questions  
All Questions carry **Equal** Marks

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1. Enumerate the various branches of Geology. Add note on the importance of structural geology to major civil engineering constructions.
2. What is mineral? Explain briefly about variation silicate mineral groups.
3. Define rock? Explain the Igneous rocks classification based on various factors.
4. Describe with neat sketches different types of faults? Explain the significance of joints in civil Engineering constructions.
5. What are earth quakes? Describe fully the cause and effects of earth quakes.
6. Write an essay on engineering properties of rocks.
7. Describe with neat sketches the ideal geological conditions for the alignment of a tunnel.
8. Explain the primary causes for dam failures of the past.