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Code No. : 13117 O2

VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
B.E (Civil Engg. : CBCS) III-Semester Backlog (Old) Examinations, December 2018

Geology

Time: 3 hours

Max. Marks: 70

Note: Answer ALL questions in Part-A and any FIVE questions from Part-B

Part-A (10 × 2=20 Marks)

1. What is hardness of a mineral? List out Moh's scale of hardness.
2. Differentiate between the schistose and gneissose structure
3. What is extension and release joints?
4. Draw the neat sketch of recumbent fold and label the parts.
5. Define term Aquifer and classify them.
6. What is a spring?
7. Define spillway of a dam.
8. Discuss geology of Nagarjuna Sagar dam site.
9. What is overbreak and standup time in tunnels?
10. List out the causes of landslides.

Part-B (5 × 10 = 50 Marks)

11. a) What are the physical properties of minerals? and discuss them in detail with suitable examples. [5]
b) Define term texture of rocks and describe various textures of igneous rocks. [5]
12. a) What is a fault? Describe different types of faults. [7]
b) What is slake durability index? Explain it. [3]
13. a) Draw a neat sketch illustrating the various components in hydrological cycle and explain it. [4]
b) What is groundwater table and describe in detail the groundwater exploration? [6]
14. a) What is a Dam? What are the geological considerations in dam site selection? [7]
b) Discuss dam failure that you know. [3]
15. a) Explain the role of structural features in the tunnel site selection. [6]
b) What is earthquake? List out causes of earthquakes. [4]
16. a) Describe the physical properties of the minerals (a) Quartz (b) Olivine (c) Biotite. [6]
b) Explain about formation of Soils. [4]
17. Answer any *two* of the following:
a) Zones of Ground Water Movement [5]
b) Reservoir induced seismicity [5]
c) Pay line of tunnels [5]
