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Code No.: 21014 S

VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
B.E. II Year (Civil Engg.) I-Semester Supplementary Examinations, May/June-2017

Engineering Geology

Time: 3 hours

Max. Marks: 70

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

Part-A (10 X 2=20 Marks)

1. Write the physical properties of Olivine.
2. What is stratification?
3. What are release and extension joints?
4. Draw a neat sketch of recumbent fold and label the parts.
5. Define the terms aquiclude and aquifuge.
6. What is a spring?
7. Define spillway of a dam.
8. Write about the reservoir induced seismicity.
9. What is a pay line and overbreak of tunnel?
10. Define epicentre and hypocentre.

Part-B (5 × 10 = 50 Marks)

11. a) What are the physical properties of minerals? Discuss them in detail with suitable examples. [5]
b) Define the term texture of rocks and explain the types of textures in igneous rocks. [5]
12. a) What is a fault? How are faults classified and describe different types of faults. [7]
b) What is slake durability index? Explain it. [3]
13. a) Write an essay on ground water exploration. [7]
b) Describe vertical distribution or zones of groundwater. [3]
14. a) What is a dam? What are the geological considerations in dam site selection? [7]
b) Discuss a dam failure that you know. [3]
15. a) Discuss the role of various structural features to be considered in the selection of a tunnel site. [5]
b) What is an earthquake, list out the causes and effects of earthquakes? [5]
16. a) Discuss geological and geotechnical properties of the following rocks [5]
i) granite ii) sandstone.
b) Explain the various types of unconformities. Add a note on their recognition. [5]
17. Answer any *two* of the following:
a) Types of aquifers. [5]
b) Geology of any major dam site of India. [5]
c) Causes and remedial measures of land slides. [5]
