

Hall Ticket Number:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Code No. : 13115 S

VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
B.E. (Civil Engg.: CBCS) III-Semester Supplementary Examinations, June-2019

Geology

Time: 3 hours

Max. Marks: 60

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

Part-A (10 × 2 = 20 Marks)

1. List the mohs scale of hardness.
2. Distinguish between the schistose and granulose structures.
3. Draw the neat sketch of fault and label the parts.
4. Explain spheroidal weathering.
5. What is an aquiclude and aquifuge?
6. Calculate the apparent resistivity of formation for the given data wenner configuration arrangement .Electrode separation=10 mts, V=60 millivolts, i=120 milliamps.
7. Write the control measures of leakage of reservoirs.
8. Analyse any one failure of the dam.
9. Define the terms over break and pay line in tunnels.
10. Classify the various types of seismic waves.

Part-B (5 × 8 = 40 Marks)

11. a) Describe the properties of the following minerals i) Microcline and ii) Kyanite. [3]
b) Categories the various textures exhibited by Igneous rocks. [5]
12. a) Describe various classifications of folds. [5]
b) Explain in detail the different types of chemical weathering. [3]
13. a) Write an essay on ground water exploration. [5]
b) Discuss the porosity and permeability in rocks and the factors controlling them. [3]
14. a) Explain the importance of structural features in the selection of a dam site. [6]
b) Write the causes of silting of reservoirs and their remedial measures. [2]
15. a) Describe the influence of geology in the selection of a tunnel site. [6]
b) Calculate the thickness of top layer from the following seismic refraction data: [2]
Critical distance = 80m.
Velocity of the shock wave in the top (weathered) layer = 1500m/sec,
Velocity of the shock wave in the bottom bed rock = 4500m/sec.
16. a) Illustrate the various structures exhibited by sedimentary rocks. [4]
b) Explain the different types of unconformities. Add note on their recognition. [4]
17. Answer any *two* of the following:
a) Differentiate the different types of aquifers. [4]
b) Describe the geology of any one major dam site of India. [4]
c) Explain the causes and effects of earth quakes. [4]

ॐॐॐॐॐॐ