Hall Ticket Number:												

Code No.: 13106 S

VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD B.E. (Civil Engg.: CBCS) III-Semester Supplementary Examinations, May/June-2018

Geology

Time: 3 hours

Max. Marks: 70

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

Part-A $(10 \times 2 = 20 \text{ Marks})$

- 1. Define the hardness and cleavage of a mineral.
- 2. Write about the cross bedding and graded bedding in sedimentary rocks.
- 3. Differentiate the angular unconformity and disconformity.
- 4. What is spheroidal weathering in basalt.
- 5. What is a spring.
- 6. Draw a neat sketch of hydrological cycle and label the various components.
- 7. Analyse a dam failure that you know.
- 8. Write about the reservoir induced seismicity.
- 9. What is a standup time.
- 10. What are seismic waves.

Part-B $(5 \times 10 = 50 \text{ Marks})$

 Give geological description and engineering properties of the following rocks: a) Granite b) Basalt c) Laterite d) Slate 	[10]
12. a) Explain the various classifications of faults.	[6]
b) Describe the main processes of chemical weathering.	[4]
13. a) Explain the suitability of groundwater occurrences in various lithological formations	[5]
b) Describe the different types of aquifers.	[5]
14. a) Explain the geology of any one major dam site of India.	[6]
b) Suggest the solutions for the problems associated with the silting of reservoirs.	[4]
15. a) Discuss the role of various geological considerations for selection of tunnels.	[7]
b) Describe the intensity of earthquakes.	[3]
16. a) Write in detail the various structures exhibited by metamorphic rocks.	[4]
b) Explain in brief the classifications of folds.	[6]
 17. Answer any <i>two</i> of the following: a) Groundwater exploration b) Describe the various geological considerations for selection of a dam site. c) What are the causes and remedial measures for prevention of land slides. 	[5] [5] [5]