

Government College of Engineering, Aurangabad
(An Autonomous Institute of Government of Maharashtra)

T.E. (Old) (Civil) Examination
End Semester Examination Dec 2016

CE-303: ENGINEERING GEOLOGY

1.9.NOV 2016

Time: Three Hours

Max Marks: 60

“Verify the Course Code and check whether you have got the correct question paper”

N.B:-

1. All questions are compulsory
2. Figures to the right indicate full marks
3. Assume suitable data if necessary and state it clearly
4. Use of non-programmable calculator is allowed

Q1. Write short notes (attempt any three) (12)

- i) Rock forming minerals
- ii) Dyke
- iii) Perched water table
- iv) Tunnels in soft rock
- v) Artesian aquifer

Q2. Attempt any Two (12)

- i) What are igneous rocks? Explain formation of igneous rock. Discuss the classification scheme of igneous rocks.
- ii) What is mineral? Discuss physical properties of mineral in detail.
- iii) Define geology and discuss in detail its importance in civil engineering.

Q3. Attempt any Two (12)

- i) Describe with help of neat sketches, various parts and types of fold. Comment on main causes of folds.
- ii) Describe in detail all stages of a river with neat diagram.
- iii) What are faults? Describe in detail types of fault.

Q4. Attempt any Two (12)

- i) Describe in brief: preliminary geological investigation of civil engineering site.
- ii) Describe in detail: subsurface exploration techniques.
- iii) What is groundwater? Describe hydrologic cycle in nature with neat sketch.

Q5. Attempt any two (12)

- i) What is building stone? Define characters of building stones & Discuss building stones in India.
- ii) What is remote sensing? Comment on its applications in engineering geology.
- iii) What are springs? Describe in detail various types of springs.