

ROLL NO:

PRESIDENCY UNIVERSITY, BENGALURU SCHOOL OF ENGINEERING

Weightage: 20 %

Max Marks: 40

Max Time: 1 hr.

Tuesday, 25th September, 2018

TEST - 1

Odd Semester 2018-19

Course: CIV 203 Engineering Geology

III Sem. Civil

Instruction:

- (i) Read the question properly and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and Non-programmable calculators are permitted.

Part A

(3 Q x 4 M = 12 Marks)

- 1. What are the different hypothesis proposed on the origin of Earth and Explain the Nebular hypothesis with a neat diagram?
- 2. Explain the major differences between magma and Lava (minimum four points)?
- 3. Define seismic zoning map? Describe the different seismic zones in India and their significance?

Part B

 $(2 Q \times 8 M = 16 Marks)$

- 4. Write Short Notes on:
 - a. Landslides and explain their classification?
 - b. Earthquake Magnitude and Intensity (Definition, measurements and differences)?
- 5. With the help of a diagram, describe the characteristics of crust, mantle and core layers of the earth.

Part C

 $(1Q \times 12 M = 12 Marks)$

6. What are seismic / earthquake waves? How are they classified? Explain their characteristics and what are the instruments used to measure these waves and how they are useful in the locating the epicenter of an earthquake?



PRESIDENCY UNIVERSITY, BENGALURU

SCHOOL OF ENGINEERING

TEST 2

Odd Semester: 2018-19

Date: 28 November 2018

Course Code: CIV 203

Time: 1 Hour

Course Name: Engineering Geology

Max Marks: 40

Branch & Sem: CIV & III Sem

Weightage: 20%

Instructions:

(i) Read the question properly and answer accordingly.

(ii) Question paper consists of 3 parts

(iii) Scientific and Non-programmable calculators are permitted.

Part A

Answer all the Questions. Each question carries four marks.

(3x4=12)

- 1. What are minerals? Write Six examples of minerals?
- 2. Define rock cycle? What are the three major types of rocks? Describe the process with a neat diagram?
- 3. Explain the term weathering, erosion, sedimentation and lithification?

Part B

Answer all the Questions. Each question carries eight marks.

(2x8=16)

- 4a. Write any four physical properties of minerals with examples?
- 4b. Write any four types of metamorphism?
- 5. Describe the detail classification of Sedimentary rocks?

Part C

Answer the Question. Question carries twelve marks.

(1x12=12)

6. What are Igneous rocks? How are they formed? Write their classifications and explain any four engineering importance of Granites?



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PRESIDENCY UNIVERSITY BENGALURU

SCHOOL OF ENGINEERING

END TERM FINAL EXAMINATION

Odd Semester: 2018-19

Date: 28 December 2018

Course Code: CIV 203

Time: 2 Hours

Course Name: Engineering Geology

Max Marks: 80

Programme & Sem: CIV & III Sem

Weightage: 40%

Instructions:

- (i) Read the question properly and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and Non-programmable calculators are permitted.

Part A

Answer any four Questions. Each question carries five marks.

(4Qx5M=20)

- 1. Define the following terms and give an example of each?
 - a. Porosity
 - b. Permeability
 - c. Specific Yield
 - d. Specific retention
- 2. With neat diagram, explain the term gallery and write any three purposes of the gallery in the dam?
- 3. Explain with a neat diagram the anticlines and syncline folds?
- 4. List out the names of five remote sensing satellites?

OR

5. With the help of a diagram, write any three difference between zone of aeration and zone of saturation?

Part B

Answer **all** the Questions. **Each** question carries **ten** marks.

(4Qx10M=40)

- 6. What are folds? With a neat diagram explain the types of folds based on axial position and write any four important points on effects / Engineering importance of folds?
- 7. With the help of a diagram, explain Aquifers, Aquiclude, Aquifuge and Aquitard and write an example of each category?

- 8. Explain various parts of a dam and describe each part with a neat diagram?
- 9. Describe with a neat diagram, the various geological problems associated with reservoirs and write possible solutions?

Part C

Answer both the Question. Question carries ten marks.

(2Qx10M=20)

- 10. List out the various surface geophysical methods, explain with a diagram, the vertical electrical sounding (VES) method and write two advantages & two limitations?
- 11. Describe any **five** important GIS applications and **five** essential use of Remote Sensing in Civil Engineering field?