PRESIDENCY UNIVERSITY, BENGALURU
SCHOOL OF ENGINEERING

Max Marks: 80   Max Time: 120 Mins   Weightage: 40 %

END TERM FINAL EXAMINATION

I Semester AY 2017-18   Course: **CIV 203 ENGINEERING GEOLOGY**   21 DEC 2017

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Instructions:
  i.   Write legibly
  ii.   Scientific and non-programmable calculators are permitted

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Part A

[4 Q x 5 M= 20 Marks]

1. Explain shortly the different parts of a Fold with a neat sketch.

2. List out any five erosional features of Rivers / Wind. Explain any one of the listed erosional feature.

3. Explain in one line – (Any four)

    a. Aquifer

    b. Aquifuge

    c. Aquiclude

    d. Aquitard

    e. Water table

4. List out the Sub-surface methods of Geophysical investigations.

Part B

[3 Q x 10 M= 30 Marks]

5. Explain "Fault" on Earth's Crust. Classify and explain faults on the basis of the nature of net slip.

6. What are the controlling factors of Porosity? How are specific yield and specific retention related with porosity?

7. Explain Confined Aquifer with a neat sketch.

Part C

8. What are the applications of Remote sensing? Explain any one application in detail.

Or

What are the Geological factors influencing the site selection of a dam?

9. What are advantages and dis-advantages of
   a. Electrical Resistivity Method
   b. Seismic Refraction Method.

Or

Explain the depositional landforms formed by a River.

Max Marks: 40   Max Time: 60 Mins   Weightage: 20 %

TEST 2

I Semester 2017-2018   Course: **CIV 203 Engineering Geology**   25 Oct 2017 (0930-1030Hr)

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Instructions:
   i.   Write legibly
   ii. Scientific and non programmable calculators are permitted

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Part A

(3Q x 3 M= 9 Marks)

1. Define Mineral.
2. List out the **Minerals with their relevant index numbers** on the Moh's Scale.
3. Name
   a. Three types of Igneous rocks.
   b. Three types of Sedimentary rocks.
   c. Three types of Metamorphic rocks.

Part B

(3 Q x 5 M= 15 Marks)

4. List out the properties of minerals which help in identifying them & and **Explain any two**.
5. Explain Phyllosilicates quoting examples with a neat structure sketch.
6. Explain Albite Anorthite series.

Part C

(2 Q x 8 M= 16 Marks)

7. Compare the properties of Pyroxenes and Amphiboles.
   Or
   State the Physical Properties of the Minerals namely Talc and Corundum.

8. What are the uses of Stones? What are the characteristics the good building stones?

Max Marks: 40   Max Time: 60 Mins   Weightage: 20 %

TEST 1

I Semester 2017-2018   Course: **CIV 203 Engineering Geology**   20 SEPT 2017
11.00 to 12.00 Hrs

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Instructions:
  i.   Write legibly
  ii. Scientific and non programmable calculators are permitted

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Part A

(3Q x 3 M= 09 Marks)

1. Enumerate the various hypothesis of origin of Earth.
2. Define an earthquake and at what depth does it occur (along with range bifurcation)?
3. Explain Focus and Epicentre along with a neat sketch.

Part B

(2 Q x 8 M= 16 Marks)

4. Write Short Notes on :
    a. the internal structure of Earth point-wise with a neat sketch.
    b. P-Wave shadow zone and S-Wave shadow zone.

5. Describe the layers of atmosphere based on thermal variation, point-wise, with a neat sketch.

Part C

(1 Q x 15 M= 15 Marks)

6. Describe the methods of protection from Earthquakes?

Or

What is meant by seismic zoning? In how many seismic zones has India been divided? Specify the associated zone factors.