##### DEPARTMENT OF CIVIL ENGINEERING

**Subject/Sub code: Engineering Geology/CE6301**

**Year / Sem : II/III Unit-1**

**Two marks**

1. Write about geology in civil engineering.
2. What’ is meant by weathering?
3. What are the types of weathering?
4. What is meant by chemical weathering?
5. Write about the sources of groundwater
6. Write about the importance of ground water in civil engineering

7. Define aquifer?

8. Define perched water table?

9.Define Exfoliation?

10.What is meant by Littoral drift?

11.Give the earthquake belts in India.

12.What is meander?

13.What is the composition and nature of the inner and outer core of the

earth?

14.DefineMohorovicic and Gutenberg discontinuity?

15. What is spheroidal weathering?

16.Write the types of waves and currents?

17.What are the methods of wind erosion?

18.Explain “Abyssal Plain”

19.Define dunes

20.Explain deflation

21.Define attrition

22.Write about the chemical composition of earth.

23.Define plate and plate movement

 24.What is meant by karsts topography?

25. Define alluvial fans

 **Part-B**

1. Discuss the Importance of Geology in Civil Engineering (or) Scope of geology in civil engineering

2.Explain with a neat diagram the interior of the earth

3. Explain briefly about Plate Tectonics.(or) Describe the theory of plate tectonics

4. Explain seismic waves? Give a detailed account on the recording of earth quake and the earthquake belts in india. (OR) Explain how earthquakes are caused and give an account of the earth quake regions in India? (M/J-2012)

5. Explain in detail the process of physical and chemical weathering of rocks and minerals.

6. Discuss the landforms produced by erosion and deposition of rivers

7. Write an essay on the erosional and depositional features of wind

8.Explain in detail about working of sea with their engineering importance with neat sketch

9. Give a detailed account of the origin, mode of occurrence and prospecting of groundwater.

**Unit-2**

**Two Marks**

1. Define Mineralogy.

2. Name the different types of feldspar.

3. Write the uses of Clay minerals.

4. Give the physical properties calcite and write its uses

5. List the physical properties chemical composition,varieties and uses of mica

6. What are the physical properties of minerals?

7. Define Streak.

8. What is meant by fracture and types of fracture?

9. Define the formula for calculated in specific gravity.

10. What are the diagnostic characteristics of kaolin ?

11. Mention at least four examples of clay minerals ?

13. Arrange the following minerals in the order of decreasing hardness?

14. Differetiate between colour and streak of a mineral?

15. Describe the Moh’s scale of hardness of minerals ?

16. Define fracture and state the different types of fracture present in a mineral ?

17. What are mineralizers?

18. Write about the cleavage of minerals

19. Give the physical properties of Quartz

20. Give the physical properties of Augite

21. Give the physical properties of Hornblende.

22.Give the physical properties of Biotite

23. Give the properties of Amphibole

24.What is meant by Gypsum Mineral

25.Mention at least four examples of clay minerals ?

26.Write the hardness of calcite and apatite minerals ?

27.Arrange the following minerals in the order of decreasing hardness?

28.Differetiate between colour and streak of a mineral?

29..Define fracture and state the different types of fracture present in a mineral ?

30.Describe the terms Lustre and streak of minerals.

31.Distinguish between Augite and Hornblende

32.write any four structural forms of minerals?

**Part-B**

1) Briefly describe the feldspar group of minerals.

2) Write in detail about the composition, physical properties, origin, occurrence, distribution in India and uses of

1. Quartz family
2. Mica and its varieties

3. Discuss about physical properties of minerals with suitable examples

4.Describe the Physical Properties and Uses of the Following Minerals.

i)Hornblende,ii) Augite,iii)Biotite iv)Garnet v) Calcite

5. Explain the Properties, Behavior and Engineering Significance of Clay Minerals.

6.Explain the properties and uses of Gypsum minerals.