Intermediate Science 7
Unit 4: Earth's Crust
Study Guide For Test 1

Know the following:

Geology	Crust	Mantle
Core	Magnetometers	Remote Sensing
Satellite Imaging	Seismographs	Core Sampling
Pangaea	Tectonic Plates	Divergent Boundaries
Convergent Boundaries	Transform Boundaries	Earthquake
Richter Scale	Volcano	Mountain
Fault	Fold	Magma
Lava	Weathering	Chemical Weathering
Mechanical Weathering	Ice Wedge	Abrasion
Erosion	Soil	Texture
Permeability	Porosity	

Know the following:

1. Sketch and label a model of Earth's layered interior, including:

   (i) inner core
   (ii) outer core
   (iii) mantle
   (iv) crust

2. Describe the composition of each layer

3. Recognize that Earth's crust is broken into plates and movement occurs where plate margins meet (plate tectonics)

4. Identify Alfred Wegener as the person responsible for proposing the continental drift theory

5. Describe the continental drift theory and the evidence supporting it, including evidence from:

   (i) continental fit(paleogeographic)

   (ii) fossils (biological)

   (iii) rock layers (geological)

   (iv) climate (meteorological)

6. Identify the technological advances that have provided evidence to support the current theory of plate tectonics, including:

   (i) sonar
   (ii) magnetometers
   (iii) deep sea drilling

7. Identify types of plate boundaries, including:

   (i) divergent (pulling apart)
   (ii) convergent (pushing together)
   (iii) transform (sliding past)

8. Identify convection currents in the Earth as a possible explanation of the driving force mechanism behind plate tectonics.

9. Identify the theory of continental drift as one early explanation for how our Earth changed over time.

10. examine some of the catastrophic events that occur on or near Earth's surface, including:

    -(i) earthquakes
    -(ii) volcanic eruptions

11. Define earthquake

12. Explain why earthquakes occur using the concept of plate tectonics

13. Define volcano

14. Differentiate between magma and lava

15. Identify how and where volcanoes form. Include

    (i) Areas where plates converge
    (ii) Areas where plates diverge
    (iii) Areas where plates are thin (hot spots)

16. Identify explanations of volcanic and earthquake activity from the past, including:

    (i) Pele
    (ii) Glooscap

17. Explain the processes of mountain formation (311-1)

18. Define folding and faulting

19. Explain how mountains are formed using the theory of plate tectonics, including:

    (i) Folding
    (ii) Faulting
    (iii) Volcanic eruption

20. Define weathering

21. Identify types of weathering, including:

    (i) Mechanical
    (ii) Chemical

22. Define erosion

23. Identify the various agents of erosion, including:

    (i) water in motion
    (ii) meteorological processes (rain and wind)
    (iii) geological processes (gravity and glaciers)

24. Differentiate between weathering and erosion

25. Classify various types of soil according to their characteristics, including:

    (i) Coarse-textured (sandy/gravel) soil
    (ii) Medium-textured (loamy) soil
    (iii) Fine-textured (clay) soil

26. Define porosity and permeability

27. Relate porosity and permeability to soil types