Oum El Bouaghi University

Faculty of Earth Sciences and Architecture

Department of Geography and Urban Development

Geology Exam for 1st year

Questions:

1- Explain briefly what happens in the following boundaries:

   a. Divergent boundaries
   b. Convergent boundaries
   c. Transform boundaries

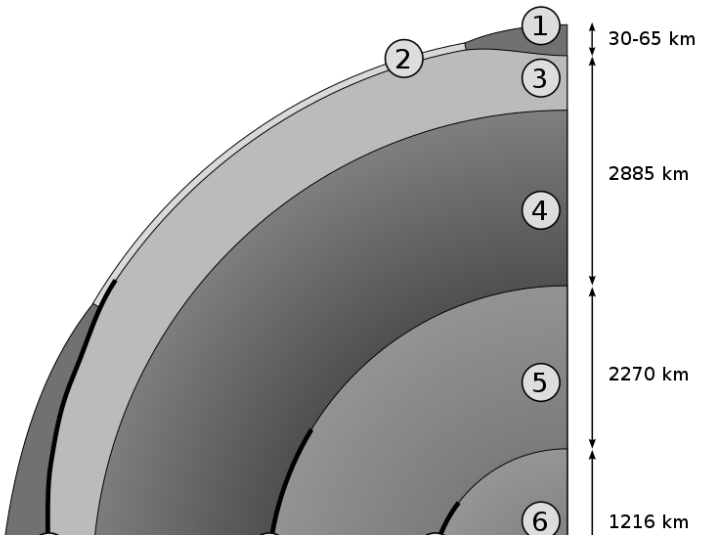
2- The classification of minerals is based on several criteria, what are those criteria?

3- Rocks are classified into three major categories based on their composition, origin, or mode of formation, name these categories and give an example of each one of them.

4- We study stratigraphy to understand the history of the earth, how?

5- Name 4 principals of stratigraphy

6- Complete each number with its appropriate structure:



Good luck

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Geology Exam Correction

Answers:

1- Explanations: (3 pts)
   a- Divergent boundaries: These are where tectonic plates move away from each other, resulting in the production of new oceanic crust.
   b- Convergent boundaries: At convergent boundaries, tectonic plates collide as a consequence of the divergence. This collision can lead to various geologic features such as mountain ranges, deep-sea trenches, and volcanic activity.
   c- Transform boundaries: Transform boundaries involve tectonic plates sliding laterally past each other along faults.
2- The classification of minerals is based on several criteria: (4 pts)
   - Chemical Composition
   - Crystal Structure
   - Physical Properties
   - Geological Origin
3- Rocks are classified into three major categories based on their composition, origin, or mode of formation: (3 pts)
   - Igneous rocks: Granite, Basalt
   - Metamorphic rocks: Micaschist, marble
   - Sedimentary rocks: Sandstone, chert
4- We study stratigraphy to understand the history of the earth by: (2 pts)
   - Dating geological events
   - Reconstruction of past environments
   - Understanding the evolution of life
   - Identification of natural resources
   - Study of climate changes
   - Environmental planning and natural risk management
5- The principles of stratigraphy: (2 pts)
   - Principle of superposition
   - Principle of Original Horizontality
   - Principle of Lateral Continuity
   - Principle of Cross-Cutting
   - Principle of Inclusions
   - Principle of Faunal Succession
6- We complete each number with the appropriate structure: (6 pts)
   1) Continental crust
   2) Oceanic crust
   3) Upper mantle
   4) Lower mantle
   5) Outer core
   6) Inner core