Laarbi Ben M'hidi University, Oum El Bouaghi Faculty of Earth Sciences and Architecture Department of Geology Answer key to the Geology 2 exam S2 2024/2025

1. Underline the correct answer(s) (3pts)

- Granite is composed of :

Feldspar (0.5), Galena, Quartz (0.5), Calcite, Orthose (0.5), Micas (0.5), Grenat, Gyps.

- Sandstone is a rock : Exogenous (0.5), Chemical, Detrital (0.5).

2. What are the most abundant chemical elements in the Earth's crust ? (2pts)

Oxygen (O₂) (1pt) and silicon (Si) (1pt).

3. What type of magmatic rock has a grain texture ? (2pts)

Plutonic magmatic rock (Intrusive).

4. What's the difference between acid magma (granitic) and basic magma (basaltic) ? (3pts)

Viscosity (1pt), silica content (1pt) and mineralogical composition (1pt).

5. What is the lower temperature limit of metamorphism? (1pt) 200°C

6. Name two factors in external geodynamics (3pts)

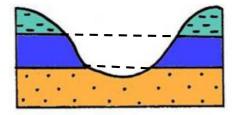
Water (1.5pt) and wind (1.5pt)

7. Name the mineral derived from the alteration of Biotite (1pt) Smectite or vermiculite

8. Stratigraphy and paleontology can be used to determine the age of a rock. Is this age relative or absolute (2pts) **Relative**

9. In stratigraphy, explain the principle of continuity (3pts)

The "Principle of Continuity" : allows us to consider, despite outcrop discontinuities, that two layers separated in space but bounded by the same layers at the base and top, are of the same age.



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