**University of Oum Boughi Departement of Geology**

**1st Term 2023 – 2024(24 th of January)**

**Exam in Technical Scientific English**

**Question 1**Which of the following word is not a sedimentary structure:(scratch on it)

* Mudclasts, graded bedding, ripple marks, folding, convolute,

**Question 2: The following sedimentary structures describe a layer of sediment in which the grain size is noticed as indicator of enegey evolution or regression:**

* **~~Bedding~~**
* **~~Cross bedding, trough cross bedding~~**
* **~~Stratification~~**
* **Graded bedding**
* **~~Bedding plane~~**

**Question 3(2,5marks)**: Among the following **terms which terms are not characteristic of the grading:** (**scratch the accurate terms)**

* **Turbidity current**
* **~~Assymetrical ripple marks~~**
* **~~Symetrical ripple marks~~**
* **Gravity**
* **Coarsening upward**

**Question 4(2,5marks)**: **In sand dunes which sedimentary structure are common ,** (**scratch the accurate terms)**

* **Trough cross bedding,**
* **planar cross bedding,**
* **sets and forsets,**
* **graded bedding**
* **~~trace fossils~~**
* **~~all the above~~**

**Question 5 planar and through cross bedding are important to describe (scratch the accurate terms)**

* **paleocurrents**
* **current direction**
* **~~Bed thickness~~**
* **~~Bed geometry~~**
* **~~Grain size evolution~~**
* **~~Sequence type~~**

**Question 6(2,5marks) : The use of sedimentary ripple shape define specially: (scratch the accurate terms)**

* **~~Symetrical and unidirectional current case of rivers~~**
* **~~Assymetrical and bidirectional current direction case of marine deposits~~**
* **Assymetrical Current direction**
* **Symetrical Wave direction**
* ~~Gravity movement~~
* ~~Grain size evolution~~
* ~~Grading~~

Sedimentary rocks are formed on or near the Earth’s surface, in contrast to metamorphic and igneous rocks, which are formed deep within the Earth. The most important geological processes that lead to the creation of sedimentary rocks are erosion, weathering, dissolution, precipitation, and lithification.

Erosion and weathering include the effects of wind and rain, which slowly break down large rocks into smaller ones. Erosion and weathering transform boulders and even mountains into sediments, such as sand or mud. Dissolution is a form of weathering—chemical weathering. With this process, water that is slightly acidic slowly wears away stone. These three processes create the raw materials for new, sedimentary rocks.

Precipitation and lithification are processes that build new rocks or minerals. Precipitation is the formation of rocks and minerals from chemicals that precipitate from water.

Sedimentary rocks can be organized into two categories. The first is detrital rock, which comes from the erosion and accumulation of rock fragments, sediment, or other materials—categorized in total as detritus, or debris. The other is chemical rock, produced from the dissolution and precipitation of minerals.

**Question II (5 marks)**

**The text consists on which topic(3 lines to summarize it), based on selected key words**

**R:** erosion, weathering, dissolution, precipitation, lithification, water, detrital and chemical: from these terms you may build up your 3 to 4 lines summary (maximum)