LICENCIATURA EM GEOGRAFIA

Exame de Geomorfologia Litoral

ÉPOCA NORMAL ***20 janeiro de 2025***

O exame é de resolução **individual** e sem recurso a consulta.

1. The sea is rarely at rest. Even if there is no surface agitation, the tide involves movements in the water column.

1.1 Label the **wave parameters** shown in **figure 1** by the numbers **1 to 4.**
1.2 With regard to waves, **distinguish between significant height and maximum height**.
1.3 Why doesn't the **process of waves breaking** occur in the middle of the ocean?
1.4 How are **waves generated** in the oceans?

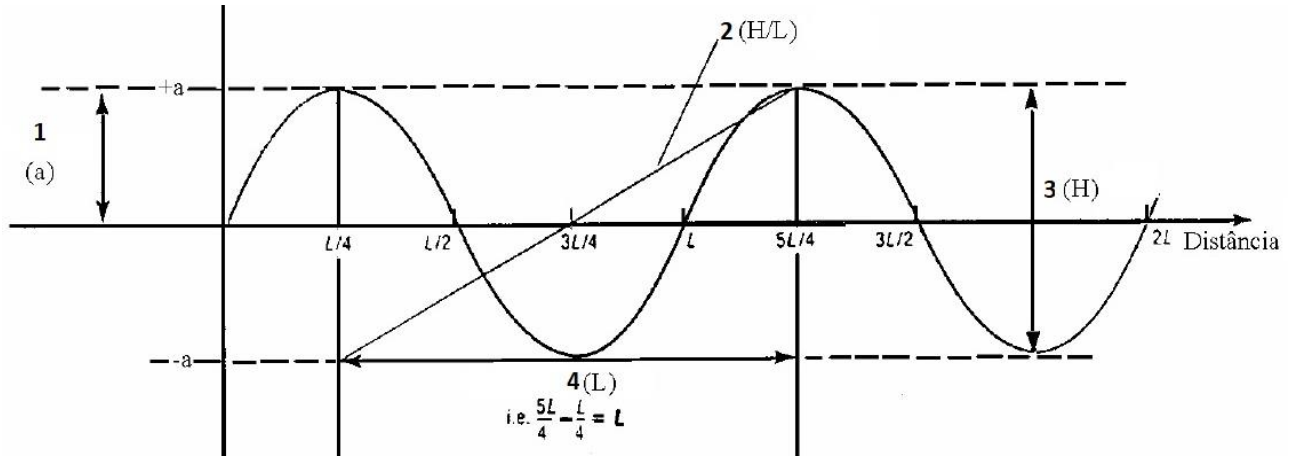

Figure 1 - The parameters of the wave.

1.5 Label the **tidal elements** shown in **figure 2** by the numbers **1 to 7**.
1.6 Identify the **tidal regime** of **tide gauges A and B** shown in f**igure 2**. Justify your answer.
1.7 Briefly describe the **tidal formation process**.

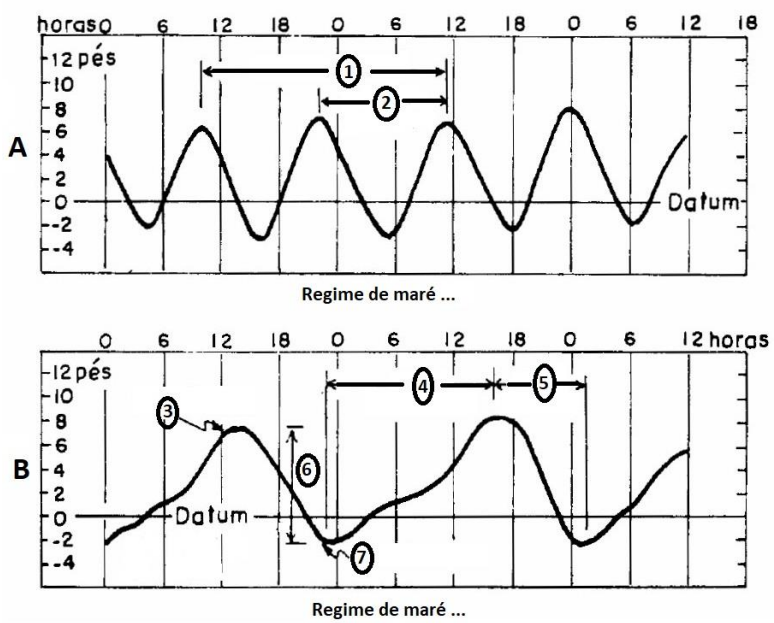

Figure 2 - The elements of the tide.

2. Identify the erosive agents that act on the coast and list the main forms that characterise rocky coasts and sandy coasts.

3. Assuming you're going on a field trip to the coast of Nazaré today, using the internet, prepare the following information in graph form:

- tide gauge for this week (see Hydrographic or others);
- significant and maximum swell height in the last 24 hours (Hidrográfico - Nazaré Oceânica or Puertos del Estado);
- wind felt today, average speed and gust (https://www.wunderground.com/dashboard/pws/IPATAI7).

3.1 - Analyse the graphs you have obtained.

Boa sorte.