

Training course on the installation & maintenance of sea level stations and use of data

17 – 21 November 2025

Knowledge Test

Name:

Circle the correct answer:

1. Tide gauges have been in use for:

- a) ~50 years
- b) ~30 years
- c) ~250 years
- d) ~400 years

2. Circle the correct statement(s):

- a) High Water occurs twice daily everywhere in the ocean
- b) The Sun causes neap tides and the Moon causes spring tides
- c) Combined forcings of the Sun and the Moon produce spring and neap tides
- d) Tidal variations can be so large that they mask other sea level changes

Circle all answers that apply.

3. Tsunamis can be caused by:

- a) undersea earthquakes
- b) submarine landslides
- c) terrestrial landslides
- d) volcanic eruptions
- e) asteroid and comet impacts
- f) man-made explosions

- g) ice calving
- h) rapid atmospheric changes

Circle the correct answer

4. Why is it important to level a tide gauge?
- a. So that it is not wobbly
 - b. To help align it to the stars
 - c. To relate the heights of various marks to each other
 - d. So we can easily find it on a map

Circle the correct answer

5. According to the Equilibrium Theory
- a. The center of mass of the Earth-Moon system is located outside the axis that joins their gravitational centers.
 - b. The center of mass of the Earth-Moon system is located within the Earth.
 - c. The center of mass of the Earth-Moon system is located in the middle of the distance that separates their gravitational centers.

Circle the correct answer

6. Why is the nodal cycle important?
- a. To know which year is best for the analysis of the prediction
 - b. Because of its use in the calculation of the LAT
 - c. To determine the datum epoch.

Circle the correct answer

7. If the tide value at a given moment above the mean sea level is 2 meters, that same tide value above the chart datum is estimated to be...
- a. A value less than 2 meters.
 - b. A value greater than 2 meters.
 - c. It is not know with the information provided.

Circle the correct answer

8. The harmonic constants..
- a. K_1+O_1 produce the diurnal inequality
 - b. The phase or phase difference between M_2 and S_2 produces the neap and spring tides, respectively.
 - c. Both are true.

Circle the correct answer

9. The meteorological tide..
- a. Increase when atmospheric pressure rises.
 - b. Changes the sea level.
 - c. Both are true.

Circle the correct answer

10. Indicate which statement is correct.
- a. The S_{sa} and S_a waves correct the seasonal variation of the mean sea level throughout the year.
 - b. The highest tides occur during the solstices.
 - c. An amphidromic point has the biggest amplitude.