

GEOGRAPHY

Paper 1

2 Hours



CLEVELAND HIGH SCHOOL-MAYA

END OF TERM I EXAMS-2025

SENIOR FIVE

GEOGRAPHY

Paper One

INSTRUCTIONS:

- Attempt any two

Item 1

During a school field trip to a science museum, students visit an exhibit about the Earth's internal structure. They learn that the mantle, which lies between the crust and the core, plays a major role in transferring heat from the interior to the surface of the Earth. The exhibit explains that this heat comes from two main sources: the decay of radioactive elements and residual heat from the planet's formation.

Task.

Based on what you have learned, explain how heat is generated in the Earth's mantle and describe how this heat contributes to geological processes such as plate tectonics and volcanic activity.

Item 2

In the year 1912, a German scientist named Alfred presented his ground-breaking theory on how continents moved across the Earth's surface. He gathered evidence from different continents, showing that similar fossils, rock formations, and ancient climatic conditions existed in far-apart regions.

Imagine you are a researcher in the early 20th century, attending one of Wegener's lectures. He explains that South America and Africa seem to fit together like puzzle pieces, and he shows fossil evidence of Mesosaurus, a freshwater reptile found in both continents but nowhere else. He also points out that coal deposits found in Antarctica suggest that the continent once had a warm, tropical climate. However, many scientists in the room are puzzled because they believe the Earth's crust is static and unmoving. After the lecture, you are asked to write a detailed scientific response.

Task

- (a) Explain whether you agree or disagree with Wegener's theory and justify your position.
- (b) Use at least four evidences that support or contradict his ideas.

Item 3

During a geography field study, a team of scientists observes two distinct geological regions.

In Region A, they find a deep oceanic trench near a volcanic mountain range along the coast, while in Region B, there's a wide rift valley with frequent shallow earthquakes and evidence of new crust forming. The scientists suspect that these features are directly related to plate tectonic activity explained by the continental drift theory.

Task.

Using your understanding of continental drift theory and plate tectonics, explain the type of plate boundary activity occurring in both Region A and Region B.

END