

I. Read the following text and then choose the right option for each question:

Most earthquakes are caused by large-scale movements of the Earth's lithospheric plates, and occur at the boundaries between the plates. Experts recognize seven to twelve major plates and a number of smaller ones. The plates take their names from continents (the North American plate); from oceans (the Pacific plate); and from geographic areas (the Arabian plate).

The plates are in very slow but constant motion, so that seen from above, the Earth's surface might look like a slowly moving spherical jigsaw puzzle. The plates move at rates of 2 to 15 cm or several inches in a year, about as fast as our fingernails grow. On a human scale, this is a rate of movement that only the most sophisticated instruments can detect. But on the scale of geological time, it's a dizzying speed. At this rate, those almost-four-billion-year old rocks could have traveled all the way around the Earth eleven times.

The movement of the plates is generally one of three kinds: spreading, colliding or sliding. When plates are spreading, or separating from each other, we call their movement divergent. When they are colliding, or pushing each other, we call the movement convergent. Movement in which plates slide past each other is called lateral (or transform) plate movement. Earthquakes can accompany each of the three types of movement.

The revolutionary theory of plate tectonics originated early in the 20th century, although it did not gain general acceptance until the late 1960s. The German meteorologist, geophysicist, and explorer Alfred L Wegener is now given credit for the first step in understanding the movement of the lithosphere. In the period 1910-1912 he formulated the theory called continental drift and collected evidence from the rocks, fossils, and climate of various continents to show that they had once been joined together. Wegener had little data on the oceanic crust, so he thought that the continents merely moved through that crust.

1. Earthquakes occur when what parts of the tectonic plates collide?

- a. the peaks
- b. the edges
- c. the centres

2. Tectonic plates can get their names from what?

- a. rivers
- b. cities
- c. seas

3. Why is the phrase "jigsaw puzzle" used in the second paragraph?

- a. because of the way the plates fit together
- b. to show how complex everything is
- c. because of the number of plates

4. Why have the plates travelled so far?

- a. because they are moving quite fast
- b. because Earth is not very big
- c. because of the age of the Earth

5. Can earthquakes be caused when plates are moving away from each other?

- a. yes
- b. no
- c. only if they are touching