

**Indian Institute of Science Education and Research Kolkata**

**Earth and Planetary Sciences (ES1101, Autumn 2023)**

**Model Question Paper**

**Instructor: Gaurav Shukla**

1. Briefly discuss the elastic rebound theory for earthquake and possible reasons for the non-periodic occurrence of earthquakes along a particular fault.
2. Discuss the formation of P- and S-waves shadow zones.
3. Briefly discuss the radial variation of the P- and S-wave velocities inside the Earth and relate these variations to the layered Earth structure based on physical properties.