

## Chapter 1

- Q1. What do you mean by elastic rebound theory?
- Q2. Write step by step procedure for determination of the location of epicenter.
- Q3. Describe the theory of continental drift and plate tectonics.
- Q4. Estimate the moment magnitude of an event with rupture length of 150km, rupture width of 62km and slip of average fault slip of 4m. Take modulus of rigidity,  $\mu$  as  $3.7 \times 10^{10} \text{ N/m}^2$ .
- Q5. At a recording station a difference in time of arrival between P waves and S waves was observed to be 1.9 seconds. What is the approximate distance from the station at which the event occurred? Assume P wave velocity as 4.2km/sec and S wave velocity as 1.85 km/sec.