I- Answer the following questions:

1- Describe in detail the different shot receiver pattern used in reflection seismology?

2- What happen when a wave reaches a boundary between two substances in which the wave speed are different?

3- Explain how to calculate depths to a succession of horizontal reflection and the velocities in the layers between them by means of reflection time?

4- Illustrate by drawing only each of the following:
   a) The variation of normal move-out time with receiver distance, with depth and with velocity.
   b) Types of multiple reflections.
   c) Digital seismic recording system.

5- Why are multifold reflections important?

6- By the mean of reflection arrival times at two receivers situated at equal distance in opposite directions from the source. Calculate the dip of the reflector.

GOOD LUCK

Dr. Nadia A. Fattah