Damietta University

Faculty of Science

Geology Department

Practical Seismic Exam.

4th Year Geo. - Chem.

جامعة دمياط
Damietta University

Question 1

Suppose that a seismic reflection survey was done over the layered sequence shown in the following figure where the interval velocities and layer thickness are given:

V1 =1000 m/s	h1 = 50m
V2 = 2500 m/s	h2 =100m
V3 = 1500 m/s	h3 = 75m
V4 = 3000 m/s	h4 = 150m

V5 = 4000 m/s

• **Determine** the average **and** root-mean-square velocities as function of zero-offset reflection time**?**

Question 2

The following tables indicate the data which obtained during a seismic refraction surveys.

Distance (m)	15	30	45	60	75	90	105	120		150	165	180
Time (ms)	12	……	36	……	60	……	65	……	70	……	75	……

It is required to:

a) Draw the travel time curve and complete the table.

b) Calculate the wave velocity for each bed.

c) How many beds you have obtained from the travel time curve and calculate the available thickness (es).

"With my best wishes"