

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:

$V1 = 1000 \text{ m/s}$	$h1 = 50\text{m}$
$V2 = 2500 \text{ m/s}$	$h2 = 100\text{m}$
$V3 = 1500 \text{ m/s}$	$h3 = 75\text{m}$
$V4 = 3000 \text{ m/s}$	$h4 = 150\text{m}$
$V5 = 4000 \text{ m/s}$	

- **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"