

# 國立中央大學八十五學年度碩士班研究生入學試題卷

所別: 應用地質研究所 不分組 科目: 地球物理探勘學

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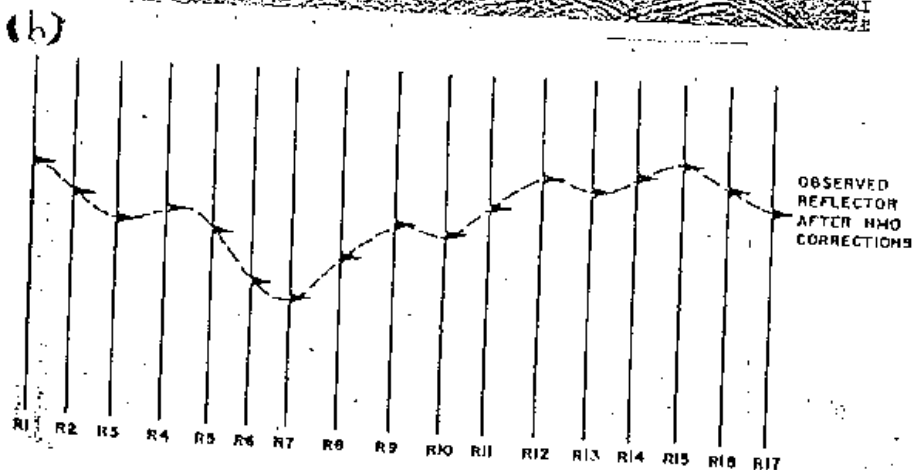
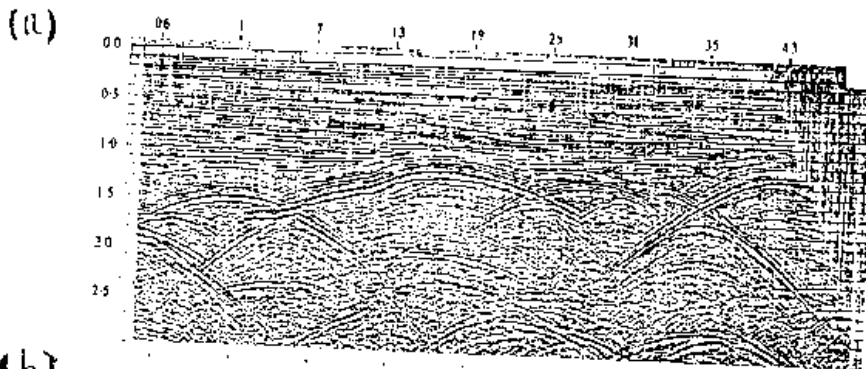
1. Define the following words: (20%)

- a. migration
- b. culture noises
- c. demultiplex
- d. mute
- e. gravity anomaly
- f. magnetic anomaly
- g. apparent resistivity
- h. prewhiten
- i. intercept time
- j. stacking

2. Give the difference between each term. (30%)

- a. static correction VS. dynamic correction
- b. residual gravity VS. residual magnetism
- c. Wenner array VS. Schlumberger array
- d. convolution VS. deconvolution
- e. synthetic seismogram VS. seislog
- f. AGC and PGC

3. Interpret the following seismic sections. (20%)



4. Derive the resistivity of the ground ' $\rho$ ' by using the following sounding array, where A,B are the current electrodes and M,N are the potential electrodes. The current passes into the earth is I and the distance between A,M; A,N; B,M; B,N are  $r_1, r_2, r_3, r_4$  respectively. (15%)  
(Hint: the potential 'V' at a distance r from a point current source I is  $V=I\rho/2\pi r$ )

5. Describe the detail procedure of gravity correction, especially in the physical meaning of each procedure. (15%)

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