Test #1ENG

October 30, 2025 1:33 PM

ENVGEO

Student Name	Score (#)	A seismic receiver (geophone) is able to correctly record seismic motion having frequencies lower than its fundamental (resonant) frequency	The dual polarization of the S-wave is:	A seismic source working in the frequency range 50-400 Hz is:	A piezoelectric transducer acting as a receiver is able to convert an acoustic (pressure) wave into an electric signal (potential difference)	The seismic wave velocity:	The shear (S) wave velocity can change in a single lithotype as a function of the saturation.	The velocity of the acoustic wave in water is:	The head wave:	For a shot executed with a certain offset from the first (or the last) geophone in a seismic refraction survey, it can happen that the direct wave is never a first arrival.	The thickness of the shallow layer in case of a two-layer medium (plane-parallel layers) is obtained by the estimation of:
	10	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point
Boh	**6**	T	A. always mandatory because it is never a first arrival and can be hidden by the P wave	A. sledge-hammer	T	C. almost always decreases with depth except near surface where it can increase	F	B. between 1450 and 1550 m/s	D. exists on surface only starting from the cross-over distance and it is a first arrival after the critical distance	F	A. velocities of both layers and intercept time
Jacopo	**8**	F	A. always mandatory because it is never a first arrival and can be hidden by the P wave	A. sledge-hammer	T	D. almost always increases with depth except near surface where it can decrease	F	B. between 1450 and 1550 m/s	D. exists on surface only starting from the cross-over distance and it is a first arrival after the critical distance	T	B. velocity of shallow layer and intercept time
Michiko	**6**	T	A. always mandatory because it is never a first arrival and can be hidden by the P wave	A. sledge-hammer	T	D. almost always increases with depth except near surface where it can decrease	T	B. between 1450 and 1550 m/s	D. exists on surface only starting from the cross-over distance and it is a first arrival after the critical distance	F	A. velocities of both layers and intercept time
Point	**8**	F	A. always mandatory because it is never a first arrival and can be hidden by the P wave	A. sledge-hammer	T	C. almost always decreases with depth except near surface where it can increase	F	B. between 1450 and 1550 m/s	B. exists on surface only starting from the critical distance and it is a first arrival after the cross-over distance.	T	B. velocity of shallow layer and intercept time
Sapienza Università di Roma	**4**	T	A. always mandatory because it is never a first arrival and can be hidden by the P wave	A. sledge-hammer	T	C. almost always decreases with depth except near surface where it can increase	T	A. between 330 and 340 m/s	C. exists on surface at any distance from the source and it is a first arrival after the critical distance	T	D. only intercept time
Student3	**6**	F	B. always mandatory because it has a low amplitude compared to the P-wave	B. Chirp (sub-bottom profiler)	T	D. almost always increases with depth except near surface where it can decrease	F	B. between 1450 and 1550 m/s	C. exists on surface at any distance from the source and it is a first arrival after the critical distance	T	B. velocity of shallow layer and intercept time
Class Scoring	**6.33**	50	83.33	83.33	100	50	66.67	83.33	16.67	66.67	33.33