| Name: No: | | | | |
|--------------|--|---|-------|--|
| Μι | ultiple Choices | | | |
| 1. | | is the product of velocity and density. | | |
| | a. | Poisson's ratio | | |
| | b. | Fermat's principle | | |
| | C. | Acoustic Impedance | | |
| | d. | Young's modulus | | |
| 2. | The slope of the travel time for each of the P, S and direct arrivals is the | | | |
| | of velocity. | | | |
| | a. | Square root | | |
| | b. | Square | | |
| | C. | Cube | | |
| | d. | Inverse | | |
| 3. | The wave that originates from the source, enters the outer core and then | | | |
| | detected at the su | urface is represented by the phase | | |
| | a. | pP | | |
| | b. | PcP | | |
| | C. | P' | | |
| | d. | sP | | |
| 4. | Side- to- side motion is a characteristics of | | | |
| | a. | P - wave | | |
| | b. | S- wave | | |
| | C. | Rayleigh wave | | |
| | | Direct wave | | |
| 5. | Lithosphere is generally around thick. | | nick. | |
| | a. | 50 -100 km | | |
| | b. | 100 – 200 km | | |
| | C. | 500 -1000 km | | |
| | d. | 250 -500 km | | |

| Name: | |
|-------------------|--|
| No: | |
| 6. pP is used for | |

- a. P-wave upgoing from focus, reflected at surface
- b. P- wave reflected at surface
- c. P- wave reflected at surface twice
- d. P- wave through outer core

Review Questions - True or False

- 7. According to Snell's law, a ray traveling from one medium with velocity V_1 will bend towards the normal after entering the second medium with velocity V_2 , where $V_2 > V_1$.
- 8. Maximum amplitude of particle motion occurs along the 45 degree phase wave front.
- 9. Rayleigh waves have both longitudinal and transverse motion.
- 10. Surface waves are smaller in amplitude and longer in duration than body waves.
- 11. P and S waves are not seen in P-wave shadow zone.

Brief Description (not more than 4 lines each for the following)

- 12. Snell's law
- 13. Birch's law
- 14. Fermat principle
- 15. Huygen's principle