2018 TCNJ PHY-120A EXAM 2 Question topics
50 questions – 0.5 points each; 19 True/False, 31 Multiple Choice

True/False questions

Do the foci of most earthquakes occur at more or less than 100 km depth?

Is the Richter scale the most effective measure of an earthquakes magnitude?

What is the term used for the point where an earthquake's energy is released?

Does the first motion of an earthquake seismic wave recorded on many seismographs provide a unique solution for the orientation of the associated fault plane?

What does the S-wave shadow zone tell us about the outer core?

95% of earthquakes occur at tectonic plate boundaries where rocks converge, diverge, or slip past each other.

A one-integer increase in earthquake magnitude represents about an xx-fold increase in the amount of seismic energy released.

What kind of gravitational and magnetic anomalies correlate with subsurface iron-bearing (relatively heavy) materials?

What is and why does liquefaction occur?

What oceanic conditions are necessary for coral reefs to form?

Does the term 'sediment' include minerals extracted from water by organisms to build their shells?

Why is 'crystalline' a term used to describe igneous and metamorphic rocks?

Do compaction and cementation often occur together?

Most tsunamis are caused by shallow submarine earthquakes along what tectonic setting?

Angular unconformities are used to help establish what type of rock ages? (Relative or absolute)

A half-life is the time it takes for half of the parent element to decay to the daughter element.

What does superposition mean?

Are all mineral compounds soluble in water?

The earliest recorded attempts at estimating the age of the Earth resulted in too (old or young) of planet.

Do short- or long-lived radioactive isotope pairs in igneous rocks provide the most accurate dates?

Multiple Choice questions

What are the principle types of weathering?

What processes are included in mechanical weathering?

What is liquefaction?

What is the guiding principle of geology?

How do surface seismic waves differ from body waves?

What causes local departures (anomalies) in Earth's gravitational field at land surface?

What are the different types of chemical weathering?

What are some physical differences between active and passive tectonic margins?

What are the two types of glacial drift?

What are the two types of glaciers?

What happens to a material that becomes oxidized?

What processes produce detrital sediment?

What are the principle types of metamorphism?

What process causes ripple marks to form in sediment?

What are the principle agents of metamorphism?

What physically happens to sedimentary particles during transport?

The seismic energy released by an earthquake stems from what?

An earthquake's magnitude is a measure of what?

What is the nature of deep sedimentary deposits in the oceanic abyssal plains?

Hornfels is a metamorphic rock resulting from the interaction of an igneous body with what type of rock?

What are the major depositional settings?

What type of mathematical expression is a radioactive-decay curve?

A marine transgression occurs when sea level _____ with respect to the land

What happened to P- and S- seismic waves when they encounter between materials of different density and elasticity?

Do cross-cutting geological relationships help establish absolute or relative ages of the features?

What are surfaces of significant time discontinuity in a stratigraphic sequence called?

There will be four rock samples that you will be asked to identify based on their general criteria, for example,

1) Is a sample, low-, medium, or high-grade metamorphic?
2) Is a sedimentary rock sample a carbonate or detrital one?
3) What are two commonly recognized minerals seen in schist?
4) Is the rock mafic or felsic?