

1. What and how are the two major energy sources that influence the Earth's surface features? 15%
2. Identify the major topographic features of ocean floor, and state how they are related to the tectonic plates. 10%
3. Describe cross stratification, ripple mark and graded layers and discuss their geological significance 15%
4. List the factors that may influence weathering and explain how they can influence weathering. 10%
5. Why can the presence of water in rock or regolith promote downslope movement? 5%
6. List the types of sediment transportation in stream, and discuss factors that influence the behavior of sediment transportation. 10%
7. Why are sandstones generally better aquifers than siltstones or shales? 5%
8. List main type of deserts and discuss their origin. 15%
9. What is the effective depth of erosion by surf, and what determines this depth? 5%
10. What is the trend of change in atmospheric CO<sub>2</sub> concentration during last 140 years. Discuss the factors that might cause the change. 10%