

## **The 80<sup>th</sup> questions**

### **Define the following:**

- 1) Seismic waves.
- 2) Erosion.
- 3) Aquifer.
- 4) Moho.
- 5) Engineering Geology.
- 6) Epicenter.
- 7) Differential weathering.
- 8) Engineering Geology.
- 9) Orthorhombic System.
- 10) Specific Gravity.
- 11) Rock.
- 12) Crystal.
- 13) Sublimation.
- 14) Arch dam.
- 15) The mantle.
- 16) Losing streams.
- 17) Schist.
- 18) Gaining stream
- 19) Streak.
- 20) Lava.
- 21) Magma.
- 22) Volatiles.
- 23) Lithosphere.
- 24) Asthenosphere.
- 25) Mesosphere.
- 26) Luster.
- 27) Cleavage.
- 28) Precipitation.
- 29) Permeability.
- 30) Debris.

**Fill the following blanks with appropriate words:**

- 31) Molten rocks called ----- is found under high temperatures in the Earth's interior.
- 32) The stiff layer of the mantle and the overlying crust are referred to as the -----.
- 33) Stream shape is based on the ----- of the stream and ----- of rock it is cutting into.
- 34) One example of mechanical weathering is -----.
- 35) ----- refers to how light is reflected from the surface of a mineral.
- 36) ----- in shale can become wetting and cause instability problem of a slope.
- 37) If groundwater seeps into stream, stream is -----.
- 38) ----- is the surface in which water is pushed up by the pressure below.
- 39) ----- is rock material that is low in porosity/permeability.
- 40) Velocity of seismic waves ----- with rock density.
- 41) One example of mechanical weathering is -----.
- 42) One example of chemical weathering is -----.
- 43) The crystals of ----- system have three mutually perpendicular axes of different lengths.
- 44) Pyrite in shale can be ----- by acid water
- 45) There are three unequal axes all intersecting at oblique angles in ----- system.
- 46) ----- is movement of water from atmosphere to surface.
- 47) Porosity is the percentage of ----- in the subsurface material
- 48) P-waves propagate ----- to the direction in which the wave is moving.
- 49) ----- spot on earth's surface directly above the focus.
- 50) Weathering is a fundamental component of the -----.
- 51) Outside of meander is called a -----.
- 52) ----- faces formed when mineral breaks.
- 53) In seismic waves, ----- called shear waves.
- 54) Fossils is a feature of -----.
- 55) There are three major groups of rocks by its origin: -----, ----- and -----.  
----- is the slowest mass movement process.
- 56) In ----- crystal system there are three unequal axes all intersecting at oblique angles.
- 57) ----- is rock material that is low in porosity/permeability.
- 58) Very fast rate of molten rock cooling forms -----.
- 59) One example of chemical weathering is -----.
- 60) ----- dam must be constructed where the surrounding rocks are not strong enough to support an arch dam.

**Fill the Table.**

|    | Mineral | Level of hardness | Crystal system |
|----|---------|-------------------|----------------|
| 61 | Topaz   |                   |                |
| 62 |         | 2                 | Monoclinic     |
| 63 |         | 6                 |                |

- 64) List the characteristics of karst topography area.
- 65) What is the difference between cleavage and fracture?
- 66) How can we protect groundwater resources?
- 67) What are the problems, which can develop, associated with the lowering of the groundwater surface due to overuse /over pumping?
- 68) Write types of streams.
- 69) Explain how are caves formed?
- 70) What are the engineering considerations of igneous rocks.
- 71) List causes of slope failure:
- 72) What are the engineering considerations of sedimentary rocks.
- 73) What are the engineering considerations of metamorphic rocks.
- 74) At 4°, density of water equal to (1 g/ml), determine specific gravity of quartz, if you know weight a cm<sup>3</sup> of it is 2.8g.
- 75) Write the different between Arch dams and Embankment dams.
- 76) How can we Prevent Slope Failure.
- 77) List factors that may cause dam failure.
- 78) List geological features may cause d problems for a road or railway project.
- 79) Which buildings will be in high risk at earthquake?
- 80) Why are studying of seismic waves important?