

8. Viscosity is a property which controls the magnitude of the shear stress that develops when one layer of fluid slides over another.

9. Types of pneumatic fluids include dry gas, mist, foam and gasified mud

10. Nitrogen can be used to solve loss of circulation in areas which have an abnormally high pressure gradient.

11. Barite is a mineral used to decrease the weight of drilling mud.

Q 5: Worldwide, what is the most common cause of abnormal formation pressure?

- a. Depleted sands**
- b. Carbonate layers**
- c. Under compaction of shales**

Q6: At a depth of 1400 ft the formation pressure is 700 psi.

This formation pressure is:

- a. Abnormal Pressure**
- b. Normal Pressure**
- c. Sub normal Pressure**

Q1: The hydraulic power at the bit performs five important functions, mention these functions.

Q2: Define the following:

Blind drilling, wildcat well, drill stem, shale shaker, cementing

Q3: Describe the basic components of bottom hole assembly.

Q4: Indicate whether the following statements are correct or incorrect:

- 1. Experimental work indicates that the best carrying capacity is produced when the pipe is concentric within the annulus.**
- 2. Plug flow is a special type of turbulent flow and only occurs with yield stress materials moving at low velocities.**
- 3. There are basically two mechanisms for pipe sticking: differential sticking and mechanical sticking.**
- 4. An event which causes the drilling operation to stop is described as a non-productive time.**
- 5. Marsh funnel is a calibrated funnel used in field tests to determine the density of drilling mud.**
- 6. Pressure losses in pipes are those taking place in drill pipe and drill collar.**
- 7. Reducing some drilling parameters can be considered a prevention step of partial losses.**