Civil Engineering Hydraulic Machines Quiz Questions and Answers Pdf

1. A floating body attains stable equilibrium if its metacentre is
    a. at the centroid
    b. above the centroid
    c. below the centroid
    d. anywhere
    Ans: b
2. When a liquid rotates at constant angular velocity about a vertical axis of a rigid body, the pressure
    a. increases linearly to its radial distance
    b. varies inversely as the altitude along any vertical line
    c. varies as the square of the radial distance
    d. decreases as the square of the radial distance
    Ans: c
3. The imaginary line drawn such that the tangents at its all points indicate the direction of the velocity of the fluid particles at each point, is called
    a. path line
    b. stream line
    c. potential line
    d. streak line
    Ans: b
4. In fluids, steady flow occurs when
    a. conditions of flow change steadily with time
    b. conditions of flow do not change with time at a point
    c. conditions of flow remain the same at adjacent point
    d. velocity vector remains constant at a point
    Ans: b
5. Uniform flow is said to occur when
    a. Size and shape of the cross section in a particular length remains constant
    b. Size and shape of the cross section along a length
    c. Frictional loss in the particular length of the channels will the more than the drop in its elevation
    d. Frictional loss is the particular length of the channel will be less than the drop in elevation
    Ans: a
6. An ideal flow of a liquid obeys
    a. Continuity equation
    b. Newton's law of viscosity
    c. Newton's second law of motion
    d. Dynamic viscosity law
    Ans: A
7. In flow, the liquid particles may possess
    a. potential energy
    b. kinetic energy
    c. pressure energy
    d. all the above
    Ans; d
8. Reynold number is the ratio of initial force and

a. viscosity
b. elasticity
c. gravitational force
d. surface tension

Ans: a

9. Equation of continuity of flow is based on the principle of conservation of
   a. mass
   b. momentum
   c. force
   d. none of these

   Ans: a

10. The velocity of the fluid particle at the centre of the pipe section, is
   a. minimum
   b. maximum
   c. equal throughout
   d. none of these

   Ans: B