Hydraulics and Fluid Mechanics Objective Questions and Answers Pdf

1. Air vessels in a reciprocating pump are fitted to
a. reduce the acceleration head
b. reduce suction head
c. increase delivery head
d. smoothen delivery head
As: A
2. A Pelton wheel is
a. inward flow impulse turbine
b. outward flow impulse turbine
c. inward flow reaction turbine
d. axial flow impulse turbine
Ans: D
3. Which type of turbine is different from others?
a. Pelton wheel
b. Banki turbine
c. Girard turbine
d. Kaplan turbine
Ans: D
4. The purpose of surge tank in a pipe line is to
a. smoothen the flow of water
b. minimize friction losses in pipe
c. prevent occurrence of hydraulic pump
d. to relieve the pressure due to water hammer
As: D
5. The hydraulic radius is given by
a. wetted perimeter divided by area

b. area divided by square of wetted perimeter
c. square root of area
d. area divided by wetted perimeter
Ans: D
6. Relative velocity is
a. the difference between two velocities
b. the difference between the higher velocity and average velocity
c. average velocity
d. vector difference of two velocities
Ans: D
7. The boundary layer separation tales place if
a. pressure gradient is zero
b pressure gradient is positive
c. pressure gradient is negative
d. none of the above
Ans; B
8. The magnitude of water hammer depends on
a. the length of pipeline
b. the speed at which the value is closed
c. the elastic properties of the liquid flowing through the pipe
d. all of the above
Ans: D
9. Which of the following forces does not act in case of fluids?
a. centrifugal force
b. tensile force
c. vibratory force
d. elastic force
Ans: B

10. A type of flow in which the fluid particles while moving in the direction of flow rotate about their mass centre, is known as
a. steady flow
b. uniform flow
c. laminar flow
d. turbulent flow
Ans: D