

MCQ FMHM 4TH SEM DIPLOMA

1. The fluid in motion, where the pressure forces are not considered is known as fluid
 - (a) Statics
 - (b) Kinematics
 - (c) Dynamics
 - (d) Kinetics
2. The value of density of water
 - (a) 9.81kg/m³
 - (b) 9810Kg/m³
 - (c) 1000kg/m³
 - (d) 1500kg/m³
3. Specific volume is reciprocal of
 - (a) Weight Density
 - (b) Specific Gravity
 - (c) Mass Density
 - (d) Viscosity
4. SI unit of Viscosity
 - (a) Dyne-Sec/cm²
 - (b) Ns/m²
 - (c) M²/Sec
 - (d) Kg/m³
5. Ideal fluid is
 - (a) Incompressible
 - (b) compressible
6. Surface tension of liquid jet
 - (a) $4\sigma/d$
 - (b) $8\sigma/d$
 - (c) $2\sigma/d$
 - (d) σ/d
7. Capillary rise for water and clean glass tube is
 - (a) $h = 4\sigma/\rho g d$
 - (b) $h = 4\sigma \cos\theta/\rho g d$
 - (c) $h = 2\sigma \cos\theta/\rho g d$
 - (d) $h = 4\sigma \sin\theta/\rho g d$
8. Vacuum pressure is known as
 - (a) Above atmospheric pressure
 - (b) Same level as atmospheric pressure
 - (c) Below atmospheric pressure
 - (d) None of these
9. Piezometer is used for measuring the pressure of
 - (a) Different points
 - (b) Particular point
 - (c) Gauge pressure
 - (d) None of these
10. The Specific gravity of Mercury is 13.6 . Find the density of Mercury
 - (a) 13.6kg/m³
 - (b) 13600kg/m³
 - (c) 136000kg/m³
 - (d) 1360kg/m³
11. A pipe contain an oil of Specific gravity 0.9 . A differential manometer connected at the two points A & B shows a difference of Mercury level 15cm . Find the difference of pressure at two points
 - (a) 18688 N/m²
 - (b) 10666N/m²
 - (c) 1.8688N/m²
 - (d) 10068N/m²
12. When a vertical plane surface is submerged in a liquid the total pressure is calculated by using the formula ?
 - (a) $F = \rho g A \bar{h}$
 - (b) $F = \rho g \bar{h}$
 - (c) $F = \rho g I_0$
 - (d) $F = \rho g A \bar{h}^2$
13. Static fluid is defined as when the fluids is at rest. Here the meaning of fluid is
 - (a) Only liquid
 - (b) Only gas

- (c) Both liquid and gas (d) none of these
14. Unit of atmospheric pressure in sea level at 15°C
- (a) 101.3KN/m^2 (b) 10.3 N/cm^2
- (b) 1.033KGF/cm^2 (d) All of the above
15. Intensity of pressure at a point in static fluid is equal in all direction
- (a) Pascal's law (b) Archimedes law
- (b) Hydrostatics law (d) none of these
16. Unit of Kinematics viscosity is
- (a) M^2/Sec (b) cm^2/Sec
- (c) 1Stoke (d) all of the above
17. When the temperature increases, the viscosity of fluid
- (a) Increases (b) Decrease
- (b) Always Increases (d) Never Increases
18. Find the surface tension in a soap bubble of 40mm diameter. When the inside pressure is 2.5N/m^2 . above atmospheric pressure
- (a) $\sigma = 0.0125\text{N/m}^2$ (b) $\sigma = 00125\text{N/m}^2$
- (b) $\sigma = 00.125\text{N/m}^2$ (d) $\sigma = 0012.5\text{N/m}^2$
19. The moment of inertia of a triangle about an axis passing through centre of gravity and parallel to base is
- (a) $Bd^3/12$ (b) $bh^3/36$
- (b) $Bh^3/12$ (d) $bh/12$
20. Centre of gravity of a circle is
- (a) $\pi d^2/4$ (b) $d/2$
- (b) $\pi d^4/64$ (d) $\pi d^3/64$

GST - DIPLOMA