PPSC Physics Full Book

Sr	Questions	Answers Choice
1	An instrument which can float in the liquid to be tested and by means of which the specific gravity of the liquid may be determined is.	A. Hydrometer B. Barometer C. Siphon D. Lactometer
2	The product of velocity and cross sectional are for a liquid flowing through a pipe is a measure of the.	A. Rate of flow B. Volume of fluid C. Fluid pressure D. Fluid friction
3	In any fluid the effect of decrease in pressure with the increase in speed in a horizontal pipe is known as	A. Bernoulli's effect B. Venturi effect C. Torriculli's effect D. Shift effect
4	Venturimeter is a device used to measure	A. Density of a fluid B. Speed of a fluid C. Pressure of a fluid D. Viscosity of a fluid
5	A hydrometer floats to a particular level in sea water in fresh water it.	A. Floats lower B. Sinks completely C. Floats higher D. Floats at the same level
6	The air plane lift is based on	A. Archimedes principle B. Law of conservation of momentum C. Bernoulli's principle D. Law of conservation of energy
7	The venturimeter is an instrument used for measuring the	A. Viscosity of a liquid B. Flow speed of a liquid C. Compressibility of a fluid D. Specific gravity of a liquid
8	A wire stretches 8 mm under a load of 60 N A second wire of the same material with half the diameter and a quarter of the original length of the first wire, is stretched by the same load What is the extension of the wire.	A. 1 mm B. 4 mm C. 8 mm D. 16 mm
9	A spring obeying Hooke's law has an upstretched length 50 mm and a spring constant of 400 N m-1 What is the tension in the spriing when its overall length is 70 mm.	A. 8 N B. 28 N C. 160 N D. 400 N
10	A boat loving at constant speed 'v' through still water experiences a total frictional drag F what is the power developed by the boat.	A. 1/2 Fv B. Fv C. 1/2 Fv2 D. Fv2
11	Bernoulli's equation is Applica table to points	A. In a steady flowing liquid B. In a streamline C. In a straight line perpendicular to steamline D. In any non viscous liquid
12	If the cross sectional area of the pipe decreases the speed of the fluid increase according to.	A. Venturi relation B. Bernoulli's equation C. Equation of continuity D. Torriculli's theroem
13	Bernouli's equation includes as a special case of.	A. Hook's law B. Torricelli's therorem C. Third law of motion D. Archimedes principle
14	When a tennis balls is hit by a racket inasmuch a way that it spins as well as moves forward the velocity of the air on one side of the ball	A. Increases B. Decreases C. Remain constant D. Become zero
15	The air pressure at the bottom of an air foiling motion is	A. Greater than that on the top B. Equal to that on the top

C. Grather than that on the top
D. Zero

16	A uniform vertical wire is stretched by hanging a mass from its lower end Which of the following does ot effect the strain in the wire.	A. The stress B. The upstretched length C. The load applied D. the Young's modulus of the metal
17	A force of 10 N acting on a certain spring produces an extension of 40 mm Two such spring are connected end to end and this double length spring is extended by 40 mm What is the strain energy.	A. 0.05 J B. 0.10 J C. 0.20 J D. 0.40 J
18	If a fluid does not wet a liquid surface, the angle of contact is.	A. 90° B. less than 90° C. * greater than 180° D. between 90° and 180°
19	Viscosity of fluids with rise in temperature.	A. Increases B. Decreases C. Remains constant D. Vanishes
20	The Pressure will be low where the speed of the fluid is	A. Zero B. High C. Low D. Constant
21	If each particle of the fluid passing through a point follows the same path then flow is said to be	A. Regular flow B. Irregualr flow C. Turbulent flow D. Streamline flow
22	The terminal velocity in case of spherical droplet is directly proportional to.	A. Square of the radius of the droplet B. Radius of the droplet C. Cube of the radius of the droplet D. Half of the Radius of the droplet half
23	The dimensions of viscosity are	A. [MLT-1] B. [MT-2] C. [ML-1T-1] D. [ML2T-1]
24	The SI unit of viscosity is.	A. Kg m -1 s-2 B. kg m-1 s-1 C. kg ms=-1 D. kg m s-2
25	With increase in temperature the angle of contact of liquid.	A. Increases B. Decreases C. Becomes zero D. First increase then decreases
26	Minor losses through values, fittings, bends etc are modeled as proportional to	A. Velocity head B. Static head C. total head D. Pressure drop
27	Which principle is in effect when a ship displaces ocean water.	A. Bernouli's B. Pascal's C. Hook's D. Archimedes
28	The design of an airfoil uses	A. Archimedes principle B. Bernouli's principle C. Pascal law D. Hooke's law
29	A fluid is said to be ideal if it is	A. Non viscous B. Non viscous and incompressible C. Non viscous and with steady flow D. Non viscous incompressible and has steady flow
30	halls fall faster than rain drops due to their	A. Grater size B. Greater mass C. Greater area D. Structure