ECAT Pre General Science Physics Chapter 6 Fluid Dynamics Online Test

Sr	Questions	Answers Choice
1	Surface tension of water is due to	A. Inter molecular attractions B. Inter molecular spaces C. Inter molecular repulsion D. None of above
2	Bernoulli's equation is based upon law of conversation	A. Mass B. Momentum C. Energy D. None of these
3	The terminal velocity of a small size spherical body of radius R moving in a fluid varies as	A. R B. R² C. 1/R D. (1/R)²
4	The velocity of falling raindrops attains limited value because of	A. Up thrust of air B. Air currents of the earth atmosphere C. Surface tension effect D. Viscous force exerted by air
5	In Bernoulli's theorem the relation between velocity and pressure is	A. Inverse B. Direct C. None of the above D. Both a and b
6	In the case of an incompressible fluid in stead flow the net rate of flow of mass entering one end of the tube of flow is equal to the net rate of flow of mass leaving the other end. This equation is called	A. Quadratic equation B. Equation of discontinuity C. Equation of continuity D. None of the above
7	The smooth or steady stream-line flow is know as	A. Laminar flow B. Turbulent flow C. Both a and b D. None of the above
8	With the increase of temperature viscosity	A. Increase B. Decrease C. Remains same D. Doubles
9	The application of Bernoulli's equation is	A. Torricelli's theorem B. Venture relation C. Binomial theorem D. Both a and b
10	Bernoulli's equation is important in the field of	A. Electrical circuit B. Magnetism C. Photoelectric effect D. Flow of fluids
11	Bernoulli's equation is based upon law of conservation	A. Mass B. Momentum C. Energy D. None of these
12	With increase of temperature, the viscosity of liquid and gases	A. Increases for both B. Decreases for both C. Increases for liquids and decreases for gases D. Decreases for liquids and increases for gases
13	The velocity of falling raindrop attains limited value because of	A. Up trust of air B. Viscous force exerted by air C. Surface tension effect D. Air currents atmosphere
14	The SI unit of viscosity is	A. kg m⁻¹s⁻¹ B. kg ms⁻¹ C. kg m⁻¹s⁻² D. kg m⁻¹s

15	Matter is made up of very tiny particles called	A. Atoms B. Molecules C. Ions D. None of these
16	A fluid at a certain point has 50 J of potential energy per unit volume, 75 J of kinetic energy per unit volume,and 35 J of pressure energy per unit volume. the total energy of the fluid is	A. 125 J B. 90 J C. 160 J D. 85 J
17	The equation of continuity $A_1V_1 = A_2V_2$is for the flow of	A. an ideal fluid B. an incompressible fluid C. a non visconcous fluid D. all of the above
18	What is another name for laminar flow?	A. streamline B. unsteady flow C. turbulent flow D. both (a) and (b)
19	Blood pressure is measured in torr. Which of the following units could belong to torr?	A. N m⁻¹ B. N m⁻² C. N m D. N⁻¹m⁻²
20	Fluids have three types of energies. The Bernoulli's equation combines those energies.which of the following is one of the three enrgies possessed by a fluid?	A. potential energy B. pressure energy C. strain energy D. (a) and (b) only
21	The flow of an ideal fluid is	A. streamline flow B. incompressible flow C. non-viscous D. all of the above
22	Which of the following is a characteristic of an ideal fluid?	A. it is non-viscous B. it is incompressible C. it's motion is steady D. all of the above
23	The value for systolic blood pressure for a normal healthy person is	A. 140 torr B. 80 torr C. 90 torr D. 120 torr
24	Which of the following options correctly states the equation of continuity for an ideal fluid?	A. A₁A₂= V₁V₂ B. A₁/A₂= V₂/V₁ C. A₁/A₂= V₁/V₂ D. none of the above
25	Which of the following has the greatest coefficient of viscosity?	A. water B. gasoline C. honey D. tar
26	What are the SI base units of the coefficient of viscosity	A. Kg m s⁻² B. kgm² s⁻² C. Kg m s⁻¹ D. kg m⁻¹s⁻¹
27	Which of the following options states the names of fluids in the order of increasing viscosity?	A. mercury, motor oil, methanol B. methanol, mercury, motor oil C. motor oil, mercury, methanol D. methanol, motor oil, mercury
28	Viscosity is defined as	A. the friction between fluid and its container's walls B. the internal friction between two layers of fluid C. the resistance to flow a fluid experiences D. the extent to which outside factors effect the fluid's flow
29	Bernoulli's equation is applicable for	A. turbulent flow B. streamline flow C. both (a) and (b) D. all kinds of flows
30	The value of viscosity of a fluid is dependent on (at constant temperature)	A. the fluid itself B. the fluid and its container C. anything in contact with the fluid D. all of the above