

## ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	The liquid which conduct current is known as	A. heating effect B. chemical energy C. electrolyte D. ohm's law
2	A carnot cycle consists of	A. One step B. two step C. three steps D. four steps
3	The application of Bernoulli's equation is	A. Torricelli's theorem B. Venture relation C. Binomial theorem D. Both a and b
4	Bernoulli's equation is important in the field of	A. Electrical circuit B. Magnetism C. Photoelectric effect D. Flow of fluids
5	Bernoulli's equation is based upon law of conservation	A. Mass B. Momentum C. Energy D. None of these
6	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
7	The velocity of falling raindrop attains limited value because of	A. Up thrust of air B. Viscous force exerted by air C. Surface tension effect D. Air currents atmosphere
8	The SI unit of viscosity is	A. $\text{kg m}^{-1}\text{s}^{-1}$ B. $\text{kg ms}^{-1}$ C. $\text{kg m}^{-1}\text{s}^{-2}$ D. $\text{kg m}^{-1}\text{s}$
9	Matter is made up of very tiny particles called	A. Atoms B. Molecules C. Ions D. None of these
10	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
11	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 viscous fluid D. all of the above
12	What is another name for laminar flow?	A. streamline B. unsteady flow C. turbulent flow D. both (a) and (b)
13	Blood pressure is measured in torr. Which of the following units could belong to torr?	A. $\text{N m}^{-1}$ B. $\text{N m}^{-2}$ C. N m D. $\text{N}^{-1}\text{m}^{-2}$
14	Fluids have three types of energies. The Bernoulli's equation combines those energies. which of the following is one of the three energies possessed by a fluid?	A. potential energy B. pressure energy C. strain energy D. (a) and (b) only

15	The flow of an ideal fluid is	A. streamline flow B. incompressible flow C. non-viscous D. all of the above
16	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
17	The value for systolic blood pressure for a normal healthy person is	A. 140 torr B. 80 torr C. 90 torr D. 120 torr
18	Which of the following options correctly states the equation of continuity for an ideal fluid?	A. $A_1 v_1 = A_2 v_2$ B. $A_1 v_1^2 = A_2 v_2^2$ C. $A_1 v_1 / A_2 v_2 = v_1 / v_2$ D. none of the above
19	Which of the following has the greatest coefficient of viscosity?	A. water B. gasoline C. honey D. tar
20	What are the SI base units of the coefficient of viscosity	A. $\text{Kg m s}^{-2}$ B. $\text{kg m}^2 \text{s}^{-2}$ C. $\text{Kg m s}^{-1}$ D. $\text{kg m}^{-1} \text{s}^{-1}$
21	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
22	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
23	Bernoulli's equation is applicable for	A. turbulent flow B. streamline flow C. both (a) and (b) D. all kinds of flows
24	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
25	Fluid A is more viscous than fluid B. While flowing through a pipe of the same dimensions and material which fluid takes longer to travel at 25°C?	A. fluid B B. fluid A C. both take the same time D. not possible to determine from given information
26	The instrument which detects the instant at which external pressure becomes equal to the systolic pressure is	A. stethoscope B. thermometer C. manometer D. barometer
27	According to the Bernoulli's theorem the pressure velocity are	A. equal to each other B. proportional to each other C. inversely proportional to each other D. none of them
28	The blood pressure of a person	A. decrease with age B. increase with age C. has no effect with age D. none of them
29	Blood pressure is measured by the instrument	A. stethoscope B. sphygmomanometer C. barometer D. none of them
30	One torr is equal to	A. $13.33 \text{ N/m}^2$ B. $760 \text{ N/m}^2$ C. 760 mm Hg D. $133.3 \text{ N/m}^2$

