

## ECAT Pre General Science Physics Chapter 6 Fluid Dynamics Online Test

Sr	Questions	Answers Choice
1	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 $25^\circ\mathbb{C}?$	A. fluid B     B. fluid A     C. both take the same time     D. not possible to determine from given information
2	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
3	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
4	The blood pressure of a person	A. decrease with age B. increase with age C. has no effect with age D. none of them
5	Blood pressure is measured by the instrument	A. stethoscope B. sphygmomanometer C. barometer D. none of them
6	One torr is equal to	A. 13.33 N/m <sup>2</sup> B. 760 N/m <sup>2</sup> C. 760 mm Hg D. 133.3 N/m <sup>2</sup>
7	In a normal healthy person the value of diastolic pressure is	A. 75 - 80 torr B. 100 torr C. 120 torr D. none of them
8	In a normal healthy person the value of systolic pressure is	A. 75 torr B. 80 torr C. 120 torr D. all of them
9	The internal pressure of the blood is	A. less than the external atmospheric pressure B. greater than the external atmospheric pressure C. equal to the external atmosphericpressure D. none of them
10	Under normal circumstances, the volume of blood is sufficient to keep the vessels	A. flatted for all times B. inflated for all times C. inflated for small times D. none of them
11	Blood vessels can be stretch like rubber, therefore they are	A. rigid B. hard C. very thick D. not rigid
12	A high concentration of red blood cells increases its viscosity from	A. 3 - 5 times that of mercury B. 5 - 8 times that of mercury C. 3 - 5 times that of water D. 5 - 8 times that of water
13	The density of blood is nearly equal to that of	A. mercury B. sodium C. water D. honey
14	Blood is an	A. Compressible fluid B. incompressible fluid C. hard D. none of them

15	A device used to measure the speed of liquid flow is known as	A. barometer B. speedometer C. sphygmomanometer D. venture-meter
16	If one of the pipes has a much smaller diameter than the other and are placed horizontally then form both sides of Bernoulli's equation, we can drop the term	A. P B. 1/2 fv <sup>2</sup> C. pgh D. none of them
17	Where the streamlines are very far apart from each other, the pressure will be	A. low B. zero C. high D. all of them
18	Where the streamlines are very close to each other, the pressure will be	A. low B. zero C. high D. all of them
19	According to the Bernoulli's equation, where the speed of the fluid is high, the pressure will be	A. low B. zero C. high D. all of them
20	The velocity gained by the fluid in falling through the distance $(h_1 - h_2)$ under the action of gravity is equal to the speed of the	A. orifices B. efflux C. fluid D. none of them
21	In deriving the Bernoulli's equation, we assume that the fluid is	A. incompressible B. no viscous C. flows in a steady manner D. all of them
22	Bernoulli's equation is the fundamental equation in fluid dynamics, which relates pressure to fluid	A. speed B. height C. none of them D. both of them
23	The pressure will change in the pipe, as the fluid moves through that pipe of varying	A. cross-section B. height C. none of them D. both of them
24	The mass of fluid passing through any cross-section per unit time is called	A. electric flux B. magnetic flux C. mass flux D. none of them
25	Rate of flow can be expressed in	A. litre/sec B. litre-sec C. sec/litre D. sec/litre-m
26	The un-steady streamline flow is called	A. laminar flow B. turbulent flow C. both of them D. none of them
27	The smooth or steady streamline flow is known as	A. laminar flow B. turbulent flow C. both of them D. none of them
28	A tube tapers from 20 cm diameter to 2 cm, the velocity at first cross-section is 50 ms <sup>-1</sup> then velocity at second cross-section is	A. 5000 cms <sup>-1</sup> B. 500 cms <sup>-1</sup> C. 50 cms <sup>-1</sup> D. 0.5 cm/s
29	The equation of continuity is	A. A <sub>1</sub> A <sub>2 = V</sub> <sub>1</sub> V <sub>2</sub> B. A <sub>1/</sub> <sub>V</sub> <sub>1 = </sub> A <sub>2</sub> C. <sub>V</sub> <sub>1= </sub> A <sub>2</sub> L/sub>A <sub>1= </sub> V <sub>1= </sub> V <sub>2</sub> D. A <sub>1</sub> A <sub>2</sub> <sub>1= </sub> 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 4 <sub>2</sub> 1
30	Above a certain velocity of a fluid is called	A. turbulent flow B. steady flow C. either of them D. both of them