

ECAT Physics Chapter 6 Fluid Dynamics Online Test

Sr	Questions	Answers Choice
1	If one of the pipes has a much smaller diameter than the other and are placed horizontally then from both sides of Bernoulli's equation, we can drop the term	A. P B. $\frac{1}{2} \rho v^2$ C. ρgh D. none of them
2	Where the streamlines are very far apart from each other, the pressure will be	A. low B. zero C. high D. all of them
3	Where the streamlines are very close to each other, the pressure will be	A. low B. zero C. high D. all of them
4	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
5	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 action of gravity is equal to the speed of the	A. orifices B. efflux C. fluid D. none of them
6	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
7	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
8	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
9	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
10	Rate of flow can be expressed in	A. litre/sec B. litre-sec C. sec/litre D. sec/litre-m
11	The un-steady streamline flow is called	A. laminar flow B. turbulent flow C. both of them D. none of them
12	The smooth or steady streamline flow is known as	A. laminar flow B. turbulent flow C. both of them D. none of them
13	A tube tapers from 20 cm diameter to 2 cm, the velocity at first cross-section is 50 ms^{-1} then velocity at second cross-section is	A. 5000 cms^{-1} B. 500 cms^{-1} C. 50 cms^{-1} D. 0.5 cm/s
14	The equation of continuity is	A. $A_1 A_2 = V$ $A_1 V_1 = A_2 V_2$ B. $A_1 V_1 = A_2 V_2$ $A_1 = A_2$ C. $A_1 V_1 = A_2 V_2$ $A_1 V_1 = A_2 V_2$ D. $A_1 V_1 = A_2 V_2$

$$\frac{V^2}{2} = \frac{A^2}{2}$$

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Above a certain velocity of a fluid is called

- A. turbulent flow
- B. steady flow
- C. either of them
- D. both of them