

ECAT Physics Online Test

Sr	Questions	Answers Choice
1	Which of the following changes at an antinode in a stationary wave?	A. Density only B. Pressure only C. Both pressure and density D. Neither pressure nor density
2	The number of all the protons and neutrons in a nucleus is known as	A. atomic number B. mass number C. charge number D. none of these
3	The product of the pressure and volume of an ideal gas is	A. A constant B. Approximately equal to the universal gas constant C. Directly proportional to its temperature D. Inversely proportional to its temperature
4	Waves transport energy	A. without transport energy B. with matter C. both of them D. none of them
5	Fire fighters have a jet attached to the head of their water pipes in order to head of their water pipes in order to	A. Increase the mass of water flowing per second B. Avoid wastage of water C. Increase the velocity of water flowing out D. Increase the volume of water flowing per second
6	Swimming is based on the principle of	A. Newton's 1st law B. Newton's 2nd law C. Newton's 3rd law D. All
7	The consumption source if energy is:	A. Energy from biomass B. Hydroelectric energy C. Geothermal energy D. None of these
8	The impedance of RLC series resonance circuit at resonant frequency is	A. Greater than R B. Equal to R C. Less than R D. None of these
9	S.I. unit of planks constant is	A. $J \cdot s^{-1}$ B. $J \cdot s$ C. $J \cdot s^{-2}$ D. $J \cdot s^2$
10	The direction of the acceleration is the same as that of	A. speed B. velocity C. both of them D. none of them
11	If the value of C in a series RLC circuit is increased, the resonant frequency	A. Is not affected B. Increase C. Remains the same D. Decreases
12	The amplitude of oscillation of each atom in a metallic crystal rises with the	A. rise in temperature B. decrease in temperature C. even temperature remains constant D. all of them
13	A wave, which transfer energy by moving away from the source of disturbance is called a	A. progressive wave B. travelling wave C. both of them D. none of them
14	If water in a closed bottle is taken up to the moon and opened, the water gets	A. Freeze B. Boiled C. Dissociated into D. None of these

U and H
D. Evaporated

15 The distance covered by a body in unit time is called.

- A. Displacement
- B. speed
- C. Velocity
- D. Both B and C

16 In magnet-coil experiment, emf can be produced by:

- A. Keeping the coil stationary and moving the magnet
- B. Keeping the magnet stationary and moving the coil
- C. Relative motion of the loop and magnet
- D. Any one of above
- E. All above

17 The value of LDR depends upon intensity of:

- A. Sound falling on it
- B. Current passing through it
- C. Magnetic field surrounding it
- D. Light falling on it
- E. Non of these

18 Which one of the following is an example of resonance

- A. swing
- B. tuning a radio
- C. microwave oven
- D. all of them

19 The closed loop gain of the inverting amplifier is written as

- A. $G = \frac{R_2}{R_1}$
- B. $G = 1 + \frac{R_2}{R_1}$
- C. $G = -\frac{R_2}{R_1}$
- D. $G = 1 - \frac{R_2}{R_1}$

20 An emf is set up in a conductor when it

- A. Is kept in a magnetic field
- B. Is kept in an electric field
- C. Moves across a magnetic field
- D. Both A and B
- E. None of these