

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	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
2	A structure of polymeric solid is:	A. An ordered structure B. A disordered structure C. Intermediate between order and disorder D. Any of these E. None of these
3	Physics deals with the study of	A. Matter B. Energy C. Both of them D. Human Body
4	Two electric bulbs of 200 W and 100 W have same voltage. If R_1 and R_2 be their resistance respectively then	A. $R_1 = 2R_2$ B. $R_2 = 2R_1$ C. $R_2 = 4R_1$ D. $R_1 = 4R_2$
5	Which of the following is the longitudinal waves?	A. Sound waves B. Waves on plucked string C. Water waves D. Light waves
6	In free space, the speed of electromagnetic waves is	A. $3 \times 10^8 \text{ ms}^{-1}$ B. $3 \times 10^6 \text{ ms}^{-1}$ C. $4 \times 10^7 \text{ ms}^{-1}$ D. $3 \times 10^9 \text{ ms}^{-1}$
7	S.I. unit of planks constant is	A. J^{-1} B. J.s C. J^{-2} D. J^2
8	Slope of velocity-time graph represents:	A. Acceleration B. Speed C. Torque D. Work
9	The ratio of linear stress/linear strain is called as	A. Yong's modulus B. Bulk modulus C. Shear modulus D. Modulus
10	Heat required to raise the temperature of one mole of a gas through 1 K at constant pressure is called	A. heat capacity B. specific heat capacity C. specific heat at constant volume D. specific heat at constant pressure
11	Which one of the following phenomenon cannot be explained on the bases of Huygen's theory	A. Refraction B. Reflection C. Diffraction D. Formation of spectrum
12	In describing function of digital systems, 1 represents:	A. Closed switch B. True Statement C. Lighted bulb D. Only (B) and (C) E. All are true
13	Gaussian surface is always:	A. Rectangular B. Spherical C. Cylinder D. Box shape

E. Any of these

14 Which force is not a conservative force:

- A. Frictional force
- B. Gravitational force
- C. Electric force
- D. Elastic spring force

15 G.P. Thomson observed experimentally that electrons and neutrons possess

- A. particle-like properties
- B. wave-like properties
- C. neither particle nor wave like properties
- D. none of these

16 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

17 One radian is:

- A. Greater than one degree
- B. Less than one degree
- C. Equal to degree
- D. none of these

18 An alpha particle has a charge of

- A. $+2e$
- B. $-2e$
- C. $-e$
- D. $+3e$

19 The branch of physics, which deals with the structure and properties of solids is called:

- A. Plasma physics
- B. Solid state physics
- C. Any of above
- D. Astro physics

20 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