

## Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The application of Bernoulli's equation is	A. Torricelli's theorem B. Venture relation C. Binomial theorem D. Both a and b
2	A body starting from rest covers a distance of 0.45 Km and acquires a velocity of 300 $\text{Km h}^{-1}$ . its acceleration will be	A. $7.71 \text{ m s}^{-2}$ B. $0.5 \text{ m s}^{-2}$ C. $0.15 \text{ m s}^{-2}$ D. $0.092 \text{ m s}^{-2}$
3	Substances which break just after the elastic limit is reached, are known as	A. brittle substances B. ductile substances C. plastic substances D. elastic substances
4	At a certain instant a stationary transverse wave is found to have maximum kinetic energy. The appearance of string of that instant is	A. Sinusoidal shape with amplitude $A/3$ B. Sinusoidal shape with amplitude $A/2$ C. Sinusoidal shape with amplitude $A$ D. Straight line
5	The induced current in the loop can be Increased by	A. Using a stronger magnetic field B. Moving the loop faster C. Replacing the loop by a coil of many turns D. All above E. Both A and B
6	If current through conductor is 1 A and length of conductor is 1m placed at right angle to the magnetic field, then the strength of magnetic field is	A. $F = B \text{ s}^2$ B. $F = 0$ C. $F = B$ D. $F = B/2$
7	Total number of turns on 0.15 m length solenoid is 300. the value of n is:	A. Greater than 300 B. Smaller than 300 C. Equal to 300 D. Any of (A) or (B) E. Any of (A) or (C)
8	10 c.c. each of oxygen and hydrogen are kept in separate flasks. Then which of the following relations is correct?	A. Each have same number of molecules B. Don't have same number of molecules C. Can't be predicted D. None
9	The electric flux from a closed surface	A. Is independent of the shape of the surface B. Depends on the charge enclosed by the surface C. Both a and b D. None of the above
10	Density of fluid is defined as:	A. Its volume to mass ratio B. Product of volume and mass C. Its mass of volume ratio D. None of these
11	The range of $\beta$ -particle in air is greater than that of $\alpha$ -particle by	A. 1000 times B. 100 times C. 15 times D. 10 times
12	Certain charge $+q$ is placed at the center of a sphere. At each of the sphere, The directions of electric intensity and vector area are:	A. <p class="MsoNormal">&lt;span style="font-size:12.0pt;line-height:107%;font-family:&amp;quot;Times New Roman&amp;quot;,&amp;quot;serif&amp;quot;"&gt;Same&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</p> <p class="MsoNormal">&lt;span style="font-size:12.0pt;line-height:107%;font-family:&amp;quot;Times New Roman&amp;quot;,&amp;quot;serif&amp;quot;"&gt;Different&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</p> <p class="MsoNormal">&lt;span style="font-size:12.0pt;line-height:107%;font-family:&amp;quot;Times New Roman&amp;quot;,&amp;quot;serif&amp;quot;"&gt;Opposite to each other&lt;o:p&gt;&lt;/o:p&gt;&lt;/span&gt;&lt;/p&gt;</p> <p class="MsoNormal">&lt;span style="font-size:12.0pt;line-height:107%;font-family:&amp;quot;Times New Roman&amp;quot;,&amp;quot;serif&amp;quot;"&gt;.....&lt;/span&gt;&lt;/p&gt;</p>

At  $60^\circ$  with each other

E. Circular and endless

Both (B) and (C)

---

- 13 the current is pass through the straight wire. The magnetic field established around it has its lines of force:
- A. Circular and endless
- B. Oval in shape and endless
- C. Straight
- D. Parabolic
- E. All are true
- 
- 14 The induced emf in a coil is proportional to:
- A. Magnetic flux through a coil
- B. Rate of change of magnetic flux through the coil
- C. Area of the coil
- D. Product of magnetic flux and area of the coil
- 
- 15 A field in which the work done in moving a body along closed path is zero is called
- A. Nuclear Field
- B. Conservative field
- C. Gravitational field
- D. Non-conservative field
- 
- 16 The most suitable material for permanent magnet is
- A. cobalt
- B. iron
- C. steel
- D. alaminium
- 
- 17 Huygen's theory cannot explain
- A. Diffraction
- B. Interference
- C. Polarization
- D. Photoelectric effect
- 
- 18 The time period of pendulum, at center of earth.
- A. Zero
- B. Infinite
- C. Maximum
- D. Minimum
- 
- 19 The materials in which there are plenty of free electrons for electrical conduction are known as
- A. conductors
- B. insulators
- C. semi-conductors
- D. all of them
- 
- 20 Which one of the following is an example of SHM
- A. Motion in a plane
- B. Motion in a swing
- C. Motion in a car
- D. None of these
-