Physics ECAT Pre Engineering Online Test

Sr	Questions	Answers Choice
1	The SI unit of spring constant is identical with that of	A. Force B. Surface tension C. Pressure D. Loudness
2	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
3	The unit of spring constant is	A. J-sec B. Metre C. Nm⁻¹ D. None of these
4	When a body moves along a circular path with constant speed, it has an acceleration, which is always directed	A. Along the tangent B. Towards the centre C. Away from the centre D. None of them
5	One radian is	A. Greater than one degree B. Less than one degree C. Equal to one degree D. None of these
6	Centripetal acceleration is also called _____ acceleration	A. Tangential B. Radial C. Angular D. None of these
7	Direction of motion _____ in circular motion	A. Changes off and on B. Changes continuously C. Does not change D. None of them
8	An axis of rotation	A. Is a straight line B. Is normal to the plane of rotation C. Passes through pivot point O D. All of them
9	Conventionally the angular velocity is directed at an angle of	A. 90° to the axis of rotation B. 30° to the axis of rotation C. 0° to the axis of rotation D. None of the above
10	A point on the rim of a wheel moves 0.2 m when the wheel turns through an angle of 14.3 degrees. The radius of the wheel is	A. 0.05 m B. 0.08 cm C. 0.8 m D. 0.008 m
11	Tick the conservative force	A. Tension in a string B. Air resistance C. Elastic spring D. Frictional force
12	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
13	When a force of 0.5 N displaces a body through a distance of 2m in the direction of force, the work done is	A. 0.5 J B. 2 J C. 0.25 J D. 1 J
14	The work done in moving a body between two points in a conservative field is independent of the	A. Direction B. Force applied C. Path followed by the body D. Power
15	Which of the following types of force can do no work on the particle on which it acts	A. Frictional force B. Gravitational force C. Electric force D. Centripetal force

16	A body moves a distance of 10 m along a straight line under the action of a force of 5 N and work done in 25J. The angle which the force makes with the direction of motion will be	A. 60° B. 90° C. 30° D. 0°
17	The Space around the Earth within which it exerts a force of attraction on other bodies is known as	A. Nuclear field B. Conservative field C. Electric field D. Gravitational field
18	Work done is maximum when angle between force and displacement is	A. 0° B. 90° C. 180° D. None of these
19	Radio telescope is used to gather information from	A. Earth B. Moon only C. Far side of the universe D. Sea water
20	Aerodynamics is a branch of	A. Hydrodynamics B. Thermodynamics C. Both of them D. Statics
21	Silicon can be obtained from	A. Lead B. Uranium C. An isotope of oxygen D. Sand
22	Particles have the mass smallest of following is	A. Electron B. Proton C. Neutron D. Quark
23	The mechanics, which deals with the objects moving with velocities approaching that of light is called	A. Relativistic mechanics B. Wave mechanics C. Quantum mechanics D. Statics
24	Astrophysics is a branch of physics, which deals with	A. Sub-atomic B. Stars and galaxies C. Light and sound D. Music
25	The information from far side of the universe are gathered by	A. Radio telescope B. Microscope C. Telescope D. Spectro scpe
26	Physics deals with the study of	A. Matter B. Energy C. Both of them D. Human Body
27	The body of physics involves	A. Structure of space and time B. Interaction of electromagnetic radiation with matter C. Both of them D. Chemical Changes
28	Michael Faraday is known by his work on	A. Nuclear strong force B. Gravitational force C. Nuclear weak force D. Electric force E. None of these
29	The concept of electric field theory was introduced by	A. Michael Faraday B. Newton C. Dalton D. Kepler E. Einstein
30	Origin of the electric and the gravitational forces	A. Was known in 1911 A.D. B. Was known in 1811 A.D. C. Was known in 1711 A.D. D. is still unknown E. Was known in 1611 A.D.