

Questions for General physics (Theory)/1st Year/ 2nd Semester

Q1/ -----Is the branch of science deal with study of matter, energy and their transformation in nature.

Q2/ Unit of Mass in SI system is-----

Q3/ Unit of Electric current in SI system is-----

Q4/ Kilogram meter per second square is the unit of -----

Q5/ The units of length, mass and time are centimeter, gram and second which are used in the system.

Q6/ 1 millimeter means.....

Q7/ Which of the following is a correct statement?

- a) Like charges attract and unlike charges repel
- b) Like as well as unlike charges attract each other
- c) Unlike charges attract each other and like charges repel each other
- d) Like as well as unlike charges repel each other

Q8/ As distance between two electric charges decreases, the electrostatic force between them.....

Q9/ The resistance of a conductor at constant temperature depends on

Q10/ The resistance of a Conductor is directly proportional to.....

Q11/ The ratio of potential difference to electric current is called as.....

Q12/ $R_{\text{equivalent}} = R_1 + R_2 + R_3 + \dots + R_n$, gives the value of equivalent resistance when number

of resistances are connected in _____

Q13/ When light travel from one medium to another medium there is change in -----

Q14/ Refraction is defined as the property of light on account of which light---

- a) changes its path when it enters from one medium to other medium
- b) bounces back
- c) continues to travel in the same direction when it enters from one medium to other
- d) none of these

Q15/ Total internal reflection (T.I.R) states that, if light travelling from high refractive index to

low refractive index and if angle of incidence is greater than critical angle then-----

Q16/ The critical angle θ_c is defined as the angle of incidence at which angle of refraction is----

Q17/ When light travel from vacuum (air) into a glass block, its speed-----

Q18/ ____ are examples of vector quantities.

Q19/ A book is at rest on top of a table. Which of the following is correct?

- A. There is no force acting on the book.
- B. The book is in equilibrium.
- C. The inertia of the book is equal to the inertia of the table.
- D. There is no force acting on the table.
- E. The book has no inertia.

Q20/ A hockey puck sliding across the ice toward the goal is a good illustration of

- A. Newton's Second Law of Motion.
- B. Newton's First Law of Motion.
- C. Newton's Fourth Law of Motion.
- D. Newton's Law of Gravity
- E. Newton's Third Law of Motion.

Q21/ Newton's Second Law of Motion says that the ____ of a body is directly proportional to the ____ and inversely proportional to the ____ of the body.

Q22/ Projectile 'A' is fired at an angle of 50° above the horizontal; projectile 'B' is fired with the same speed at an angle of 40° above the horizontal. Assuming level ground and negligible air resistance, which of the following is true?

Q23/ A force is required to slide a book across the table at a constant speed because

Q24/ The _____ of an object on the Earth's surface are directly proportional to each other.

Q25/ When a falling object reaches terminal speed, its acceleration is-----