

44. The weight of a body is 980 N. Find its mass.

Ans: _____

45. Find the kinetic energy of an object of mass 2kg, moving at a speed of 10 m/sec.

Ans: _____

VI. Reasoning Type Questions:

[5 x 1 = 5]

Instruction:

The questions given below, consists of two statements viz statement-1 (assertion) and statement-2 (reason). Use the following key to choose appropriate answer.

- (a) Both statements are correct and statement-2 is the correct explanation of statement-1.
- (b) Both statements are correct but statement-2 is not correct explanation of statement-1.
- (c) Statement-1 is true & statement-2 is false.
- (d) Statement-1 is false & statement-2 is true.
- (e) Both the statements are false.

46. **Statement-1:** Parsec is used to measure distance.

Statement-2: 1 parsec is equal to 3.3 light years. []

47. **Statement-1:** Light moves very fast.

Statement-2: The speed of light is 300000km per sec. []

48. **Statement-1:** Light wave has frequency.

Statement-2: Light wave moves in oscillatory motion. []

49. **Statement-1:** Force generated by a machine is called mechanical force.

Statement-2: Magnetic force is a contact force. []

50. **Statement-1:** Energy can exist in various forms.

Statement-2: Kinetic energy is called as potential energy. []

*** BEST OF LUCK ***



IIT Foundation (Test - 01)

CLASS-VI (PHYSICS)

Total Marks

50

Name : _____

Roll No : _____ Sec : _____

I. Choose the correct answer:

[20 x 1 = 20]

1. Mile is a unit of _____.
(a) Mass (b) weight (c) Distance (d) None of these
2. The biggest unit among the given units is _____.
(a) Kilometer (b) Centimeter (c) Meter (d) None of these
3. The distance between one city to another is measured by using _____.
(a) Kilometer (b) Centimeter (c) feet (d) None of these
4. The distance between two astronomical objects is measured by _____.
(a) Centimeter (b) Light Year (c) Leap Year (d) None of these
5. The short cut for Astronomical Unit is _____.
(a) AS U (b) AU (c) As Un (d) None of these
6. In a rectangle when the length is multiplied with the breadth the output is its _____.
(a) Volume (b) Area (c) perimeter (d) None of these
7. Which among these is a unit to measure area? _____.
(a) Light Year (b) Acre (c) feet (d) None of these
8. The _____ of a thing is its quantity of space it occupies.
(a) Volume (b) Surface area (c) Height (d) None of these
9. In _____ motion, the particles of the body describe concentric circles about the axis of motion.
(a) Wave (b) Rotator (c) Rectilinear (d) None of these
10. The _____ is an example of periodic motion.
(a) Pendulum Clock (b) Falling of apple (c) Falling of meteors (d) None of these

11. The momentum of a body is proportional to its _____ and velocity.
(a) Surface area (b) Mass (c) Force (d) None of these
12. Speed of a body is the distance travelled by the body in _____.
(a) Unit time (b) Unit force (c) A magnetic field (d) None of these
13. The average speed of an object is related to its total distance travelled and _____.
(a) Total turnings (b) Total time taken (c) Weight (d) None of these
14. Unlike poles of magnets exert _____ force towards each other.
(a) Push (b) Pull (c) Repel (d) None of these
15. Friction is a _____.
(a) Force (b) Energy (c) Work (d) None of these
16. The _____ force always oppose the motion of an object.
(a) Gravitational (b) Magnetic (c) Friction (d) None of these
17. The symbol of Newton is _____.
(a) New (b) Nt (c) N (d) None of these
18. The _____ energy of an object is related to its position.
(a) Magnetic (b) Electrical (c) Potential (d) None of these
19. Which among these is a unit of energy? _____.
(a) Newton (b) Joule (c) cm (d) None of these
20. _____ is needed to run a hydro-electric power plant.
(a) Coal (b) Water (c) Petrol (d) None of these

II. Say True or False:

[10 x 1 = 10]

21. One cm = 10 millimeter. []
22. Very large distance in the universe is measured in yards. []
23. The distance between the earth and the sun is always same. []
24. The motion of earth around its axis is a periodic motion. []
25. An object's motion cannot change unless it is acted upon by a force. []
26. Motion along a curved path is called curvilinear motion. []
27. The Sun attracts the planets. []

28. Two forces can be applied to one object at a time. []
29. Energy can be converted from one form to another. []
30. Light energy enables us to snap photographs with a camera. []

III. Match the following:

[5 x 1 = 5]

31. Friction [] a. Gravitational force
32. Magnet [] b. Electric force
33. Heavenly body [] c. Contact force
34. Spring [] d. Magnetic force
35. Between proton and electron [] e. Spring force

IV. Multi Correct Choice Type:

[5 x 1 = 5]

36. Which among these are units of distance? _____.
(a) Leap year (b) Light year (c) Km (d) None of these
37. Speed is measured in _____.
(a) M/sec (b) Km/ hour (c) Meter (d) None of these
38. Which among these can be a force? _____.
(a) Push (b) Pull (c) Acceleration (d) None of these
39. Which among these are contact force? _____.
(a) Air friction (b) Friction (c) Magnetic force (d) None of these
40. Which among these transform energy into work?
(a) Stationary objects (b) cars (c) Gas stoves (d) None of these

V. Solve the following problems:

[5 x 1 = 5]

41. Find the volume of a cuboid whose length is 2 m, breadth is 3 m and height is 7m.
Ans: _____
42. The radius of a circle is 7 m. What is its area?
Ans: _____
43. A boy travells 12 kms in 4 hr. What is his speed?
Ans: _____