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X - PHYSICS

LESSON ① :-

creative one mark Questions with answer.

1) Natural motion another - - - - -
Force independent

2) Violent motion another - - - - -
Force dependent

3) Different types of inertia - - -
Three (3)

4) An Athlete runs some distance before jumping is - - - - -
Inertia of motion

5) momentum SI unit is - - -
kg ms^{-1}

6) momentum C.G.S unit is - - - -
g cm s^{-1}

7) Force is - - - Quantity
Vector

8) Different types of forces - - - -
TWO

9) A single force which is formed as - - - Resultant force

10) The axis of the fixed edge about which the door is rotated is called as the - - - -
axis of Rotation

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11) moment of the force another name---
Torque

12) Torque symbol are ---
τ (Tau)

13) Torque Its SI unit is ----
Nm

14) Torque is a --- quantity
vector

15) Rotating effect of a couple is known as ----
moment of a couple

16) The unit of moment of a couple is ---- Nm

17) The unit of moment of a couple in CGS system ---
dyne cm

18) Force = mass x ----.
acceleration

19) --- is a required to produce the acceleration of a body
Force

20) The acceleration is produce along the radius called as ----
centripetal acceleration

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21) SI unit of force is ------.

newton (N)

22) CGS system its unit of force ---

dyne

23) 1 N = -----

$1 kg\ ms^{-2}$

24) 1 dyne = -----

$1 g\ cms^{-2}$

25) 1 N = -----

105 dyne

26) 1 kgf = ---

9.8 N

27) 1 gf = ---

980 dyne

28) A large force acting for a very short interval of time is called as ---

Impulsive force

29) Impulse Its unit is ---

$kg\ ms^{-1}$ (or) Ns

30) $kg\ ms^{-1}$ (or) ---

Ns

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31) Ns (or) ----
Kgms^{-1}

32) A large force acting for a short period of ---
time

33) Rockets are filled with a fuel either liquid (or) ----
solid

34) "G" unit is ----?
$Nm^2 Kg^{-2}$

35) 'g' its unit is ----?
ms^{-2}

36) Mean value of the acceleration due to gravity is taken as ----?
$9.8 ms^{-2}$

37) Acceleration due to gravity ----?
$g = \frac{GM}{R^2}$

38) Acceleration of the body is under the action of gravity hence a = ---?
g

39) Mass of the Earth formula is ---
$M = \frac{gR^2}{G}$

40) You can calculate the mass of the Earth as ---
$M = 5.972 \times 10^{24}$ Kg.

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41) g depends on the geometric radius of the earth g α ----

$1/R^2$

42) Mass SI unit is -----

kilogram (kg)

43) The value of acceleration due to gravity on the surface of the moon is ----

$1.625\ ms^{-2}$

44) Mechanics is divided into --- and dynamics

statics

45) Calculate the velocity of a moving body of mass 5kg whose linear momentum is 2.5 kgms^{-1} ---?

$0.5\ ms^{-1}$

46) one kilogram force equal to ---?

98×10^4 dyne

47) F = weight = ------

mg

48) Newton's law of gravitational the force acting on the body is given by --- $F = \frac{GMm}{R^2}$

49) A smaller force acting for a longer period of ---

time

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50) The amount of force required to produce an acceleration of ----
1 ms^{-2}

LESSON (2).

(1) Light is a form of energy which travels in the form of ----
waves

(2) The path of light is called ----
Ray of light

(3) Light is a form of ----
Energy

(4) The speed of light ----
3×10^8 ms^{-1}

(5) The violet light has the ----
wavelength
Lowest

(6) The Red light has the ----
wavelength
highest

(7) deviation of ray of light is called ----
refraction

(8) Snell's law formula is ----

$$\frac{\sin i}{\sin r} = \frac{n_2}{n_1}$$

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(9) Raman scattering ----- scattering
Inelastic

(10) A lens is an optically ---- Medium
transparent

(11) when a parallel beam of monochromatic
---- coloured
single

(12) The spectral lines having frequency
equal to the incident ray frequency
is called ------
Rayleigh line

(13) The lines having frequencies
lower than the incident frequency
is called ----
stokes lines

(14) The lines having frequencies
higher than the incident frequency
are called ----
Anti stokes lines

(15) convex (or) -----
bi- convex lens

(16) concave (or) -----
bi- concave lens

(17) a concave lens is also called as
---
diverging lens

(18) --- are used as camera lenses
convex lenses.

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(19) The lens formula and lens maker's formula are applicable to only ---
Lenses
Thin

(20) The SI unit of power of a lens is ---
dioptre

(21) If focal length is expressed in ---
m

(22) Then the power of lens is expressed in ---
D

(23) Thus 1D is the power of a lens, whose focal length is ---
1 metre

(24) The lens maker's formula is one such equation is given as

$$\frac{1}{f} = (\mu - 1)\left(\frac{1}{R_1} - \frac{1}{R_2}\right)$$

(25) 1D = $\frac{}{1 m^{-1}}$

(26) All lenses are made up of ---
materials
transparent

(27) If the magnification is greater than 1 then we get an ---
Enlarged Image.

(28) Lens formula It is expressed as ---

$$1/f = 1/v - 1/u$$

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(29) If the magnification is less than 1, then we get a ----

diminished image

(30) The eye ball is approximately spherical in shape with a diameter of about ----

2.3 cm

(31) A normal human eye can clearly see all the objects placed between 25 cm and ----

∞ (Infinity)

(32) Myopia, also known as ----

short sightedness

(33) Then the focal length of the Required Concave Lens is ---

$f = -x$.

(34) Astigmatism can be corrected by using ----

cylindrical lenses

(35) cylindrical lenses (or) ----

Toxrid lenses

(36) Simple microscope has a convex lens of short ----

focal length

(37) compound microscope has --- to --- times more magnification power than simple microscope

50 to 200

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(38) An ---- is used to view heavenly bodies like stars,

Astronomical Telescope

(39) ---- and --- are the two major types of Telescope

Astronomical Telescope
Terrestrial Telescope

(40) The first telescope was invented by -----

John Lippershey in 1608.

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