PHYSICS

Question 1

The defect of the eye lens which occurs when the ciliary muscles are weak is called

(A) Myopia

(B) Presbyopia

(C) Spherical aberration

(D) Astigmatism



PREVIOUS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

Time

PHYSICS
Question 2

The magnitude of induced current is not enhanced by the

(A) the magnitude of the current

(B) the large number of turns in the coil

(C) the high magnetic strength of the magnet

(D) the large area of the coil



PREVIOUS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

Time

PHYSICS
Question 3

The majority carriers in a P-type semi-conductor are

(A) electrons

(B) diodes

(C) valence band

(D) holes



PREVIOUS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

PHYSICS

Question 4

One of these is not the use of an electroscope

(A) measuring ionization current in air

(B) testing the type of charge on a charge body

(C) producing electric charge in a body

(D) detecting the pressure of charge on a charged body



USE OF ENGLISH PHYSICS BIOLOGY CHEMISTRY

PHYSICS

Question 5

The thermometric property for thermocouple is change in

(A) length

(B) volume

(C) electromotive force

(D) resistance



PHYSICS

Question 6

An example of a non-rechargeable cell is

(A) nichel iron

(B) dry leclanche

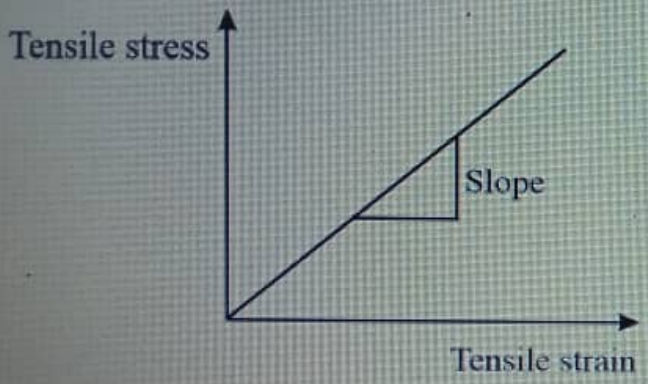
(C) mercury cadmium

(D) lead-acid



PHYSICS

Question 7



The slope of the graph of tensile stress against tensile strains represents

(A) surface tension

(B) elasticity

(C) Young's modulus

(D) viscosity

PHYSICS

Question 8

The mixture of red and cyan colours will produce

(A) yellow

(B) white

(C) green

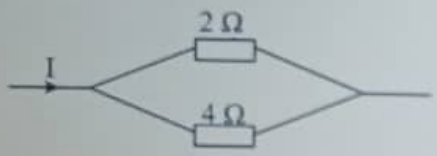
(D) magenta

PREVIOUS

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 9



Calculate the power dissipated in the 2 Ω, if the power dissipated in the 4 Ω is 5 W

(A) 10 W

(B) 30 W

(C) 40 W

(D) 20 W

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 10

As per Faraday's laws of electromagnetic induction, an e.m.f. is induced in a conductor whenever it

(A) cuts magnetic flux

(B) lies outside but close to a magnetic field

(C) lies in a magnetic field

(D) lies parallel to the magnetic flux

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 11

The velocity ratio of inclined plane inclined at 60^0 to the horizontal is

(A) 1.255

(B) 1.055

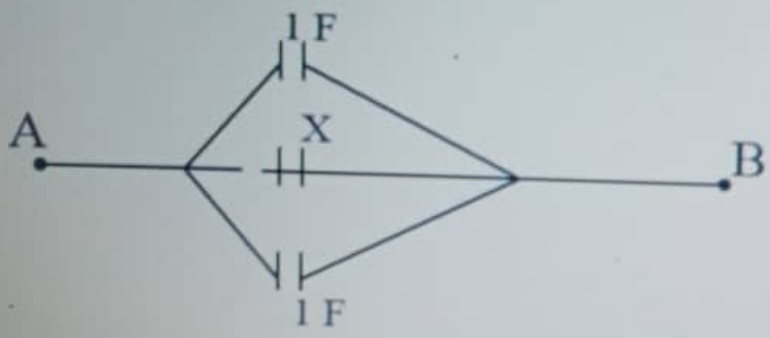
(C) 1.155

(D) 2.000

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 12



If the effective capacitance A and B is 3 F, calculate X

(A) 4.0 F

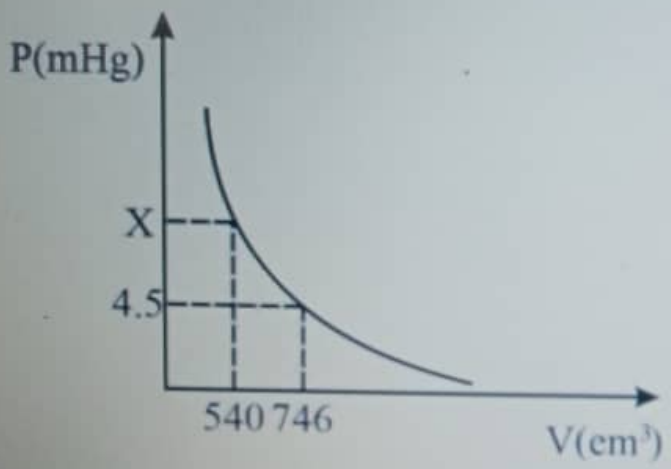
(B) 2.0 F

(C) 0.5 F

(D) 1.0 F

PHYSICS

Question 13



The behavior of a certain gas is shown by the above graph. Find X

(A) 5.34mHg

(B) 6.98mHg

(C) 7.60m Hg

(D) 6.22mHg

OJCA JAMB CLASS FORUM

PREVIOUS

PHYSICS

Question 14

The saturated vapour pressure at dew point is 10 mmHg. Calculate the saturated vapour pressure at room temperature if the rela

(A) 20.0 mm Hg

(B) 8.0 mm Hg

(C) 15.0 mm Hg

(D) 12.5 mm Hg



USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 15

The internal energy of an ideal gas is affected only by

(A) volume

(B) area

(C) pressure

(D) temperature



USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 16

The dimension's power is

(A) ML^2T^{-2}

(B) ML^2T^{-3}

(C) $ML^{-1}T^{-2}$

(D) MLT^2



USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 17

Electrolysis can be investigated using

(A) Voltmeter

(B) Galvanometer

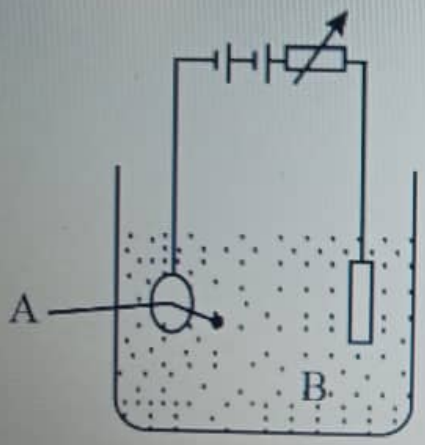
(C) Ammeter

(D) Voltameter



PHYSICS

Question 18





Find the amount of current required to deposit 0.02kg of a metal in a given electrolysis for 120s. [electrochemical equivalent of the metal = $1.3 \times 10^{-7} kgC^{-1}$]

(A) $1.3 \times 10^{2}A$

(B) $1.3 \times 10^{5}A$

(C) $7.8 \times 10^{-2}A$

(D) $7.8 \times 10^{-4}A$

PHYSICS

Question 19

Two tuning forks of frequencies 10 Hz and 2 Hz are sounded together, the beat frequency is

(A) 12 Hz

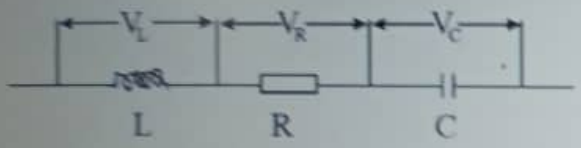
(B) 8 Hz

(C) 4 Hz

(D) 6 Hz

PHYSICS

Question 20



Using the circuit above, at resonance,

(A) $V_L = V_R$

(B) $V_R = V_R$

(C) $V_L = V_C$

(D) $V_L = V_L$

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 21

The acceleration of free fall due to gravity is not a constant everywhere on the earth surface because

(A) elliptical shape of the earth

(B) variation in the density of the earth

(C) rotation of the earth about its axis

(D) mass of the earth

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 22

The relative densities of solid X and liquid Y are 0.9 and 1.2 respectively, what is the fraction of the volume of X
Y?

(A) 100%

(B) 75%

(C) 50%

(D) 80%

HD Webcam

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 23

Which of the following combination will increase the stability of an object?

(A) Wide base and low center of gravity

(B) Narrow base and high center of gravity

(C) Narrow base and low center of gravity

(D) Wide base and high center of gravity



PREVIOUS

NEXT

HD Webcam

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 24

The sharpness of the image formed by a pin-hole camera can be obtained by

(A) Increasing the size of the hole

(B) Ensuring that the hole is a pin-size

(C) Giving the screen a white coating

(D) Placing the object further away from the hole



PREVIOUS

HD Webcam

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

Timer 114:16

PHYSICS

Question 25

A missile of mass 10 kg is projected at an angle 30° from the ground with an initial velocity 10 ms^{-1}. What is the time of flight? ($g = 10\ ms^{-2}$)

(A) 6.00 s

(B) 1.96 s

(C) 1.00 s

(D) 3.50 s



HD Webcam

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

Timer 114:13

PHYSICS

Question 26

If a jewel is placed at the bottom of a pond 5m deep, calculate the apparent displacement of the jewel when it is viewed directly from above the pond [refractive index of water $= \frac{4}{3}$]

(A) 1.75M

(B) 1.25M

(C) 3.75m

(D) 2.25m



HD Webcam

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

Timer 114:11

PHYSICS
Question 27

Which of the following is used as a control rod in nuclear reactors?

(A) carbon

(B) boron

(C) plutonium

(D) lead



HD Webcam

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

Timer 114:09

PHYSICS
Question 28

Photometer is used to measure

(A) wavelength of light.

(B) frequency of light

(C) intensity of light

(D) kinetic energy of liberated electrons



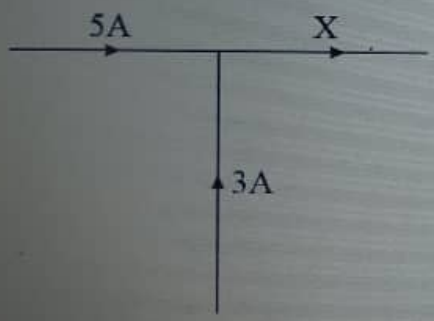
HD Webcam

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

Timer 114:07

PHYSICS

Question 29



From the above diagram, current X is

(A) 8 A

(B) 2 A

(C) 20 A

(D) 15 A



USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 30

The temperature gradient of an 8cm cube is 72 ^{0}C/cm, what is the difference in temperature between the two faces?

(A) 1000 ^{0}C

(B) 57 ^{0}C

(C) 9 ^{0}C

(D) 576 ^{0}C



USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

Timer

PHYSICS

Question 31

The specific heat capacity of glycerin is $2520Jkg^{-1}K^{-1}$. This means that 2520J of heat

(A) deceases the temperature of 1g of glycerin by 1K

(B) increases the temperature of 1kg of glycerin by 1K

(C) decreases the temperature of 1kg of glycerin by 10kg

(D) increases the temperature of 1g of glycerin by 2K



USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 32

An object is acted upon by two forces of 3N and 3N at right angle to each other. What is the resultant of the two factors?

(A) 4.1N

(B) 4.2N

(C) 5.5N

(D) 5.6N



HD Webcam

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS
Question 33

During the conversion of ice to water by addition of heat. One of these is correct.

(A) The temperature decreases

(B) The temperature changes rapidly

(C) There is no temperature.

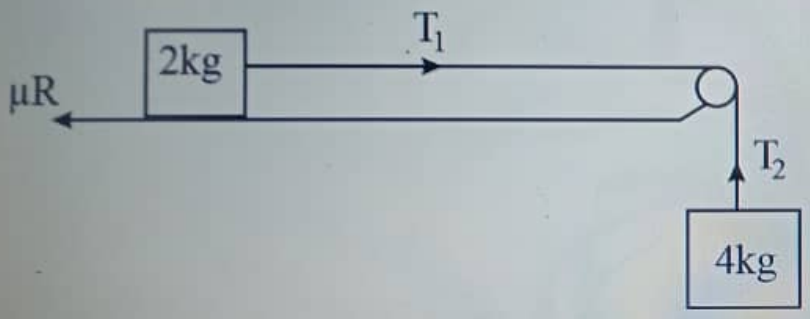
(D) The temperature remains constant



USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

Timer 113 36

PHYSICS
Question 34



OJCA JAMB CLASS FORUM

In the diagram above, if coefficient of friction between the 2kg mass and the floor s 0.5. Calculate the acceleration with which the system moves [g = 10ms^{-2}]

(A) 5ms^{-2}

(B) 10ms^{-2}

(C) 15ms^{-2}

(D) 2m^{-2}

PREVIOUS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

NEXT

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

Timer 113:34

PHYSICS
Question 35

When a voltage is applied, the direction of the electric field is

(A) From west to east.

(B) From negative to positive.

(C) From positive to negative.

(D) From north to south.



PREVIOUS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

NEXT

USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 36

I. The normal reaction between the surfaces

II. The area of the surface in contact

III. The relative velocity between the surfaces

IV. The nature of the surfaces

The limiting frictional force between two surfaces depends on

(A) I and IV only

(B) III only

(C) I only

(D) II and III only



USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

PHYSICS

Question 37

The bursting of water pipes during very cold weather, when the water in the pipes form ice could be attributed to

(A) contraction of water on freezing

(B) expansion of water on freezing

(C) expansion of ice on melting

(D) contraction of pipes when cooled



SE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

Time 113:24

PHYSICS

Question 38

Starting from rest, a car of mass 2000kg accelerates steadily to $15ms^{-1}$ in 10s. Calculate the average power developed during the period.

(A) 15000J

(B) 15500J

(C) 45000J

(D) 10000J



USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

Timer 113

PHYSICS
Question 39

Myopia can be corrected using

(A) suitable converging lens

(B) suitable diverging mirror

(C) suitable converging mirror

(D) suitable diverging lens



USE OF ENGLISH | PHYSICS | BIOLOGY | CHEMISTRY

Timer

PHYSICS

Question 40

An open pipe is different from a close pipe because

(A) it contains odd harmonics while a close pipe has even harmonics.

(B) its overtones are even harmonics while a close pipe are odd harmonics.

(C) its vibrations are longitudinal while that of a close pipe are transverse.

(D) it contains odd and even harmonics while close pipe has odd harmonics.



PREVIOUS