## تجميعات فيزياء 2020

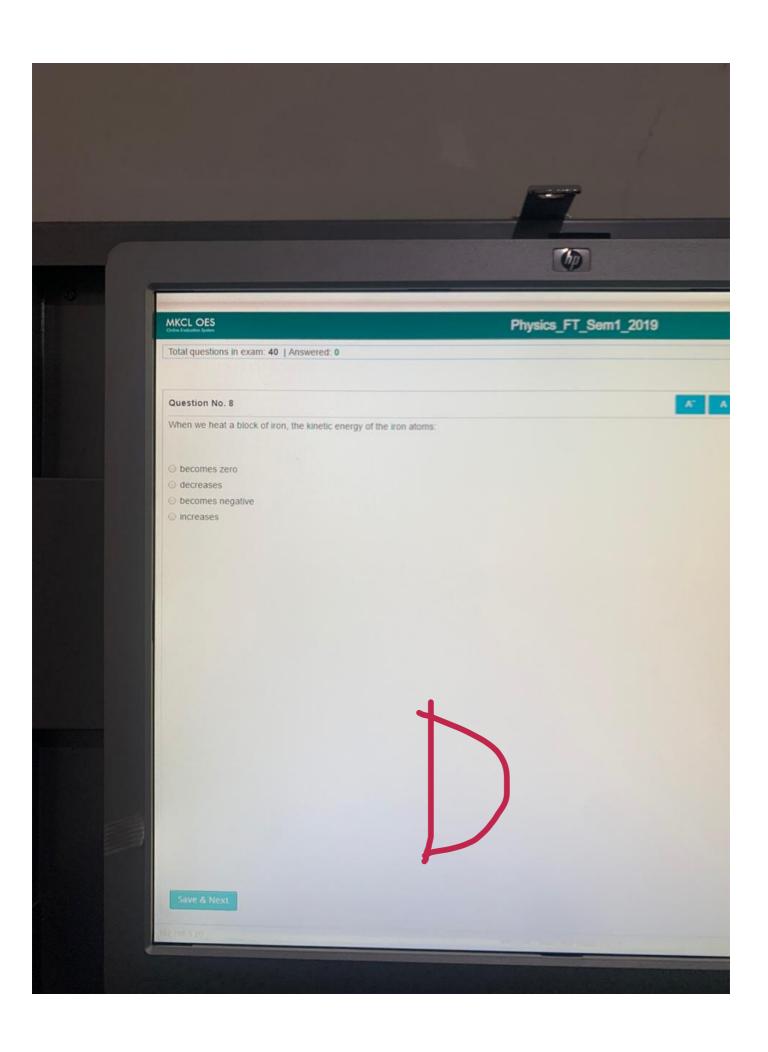
فاينل ( من شابتر 3 الى شابتر 6 )

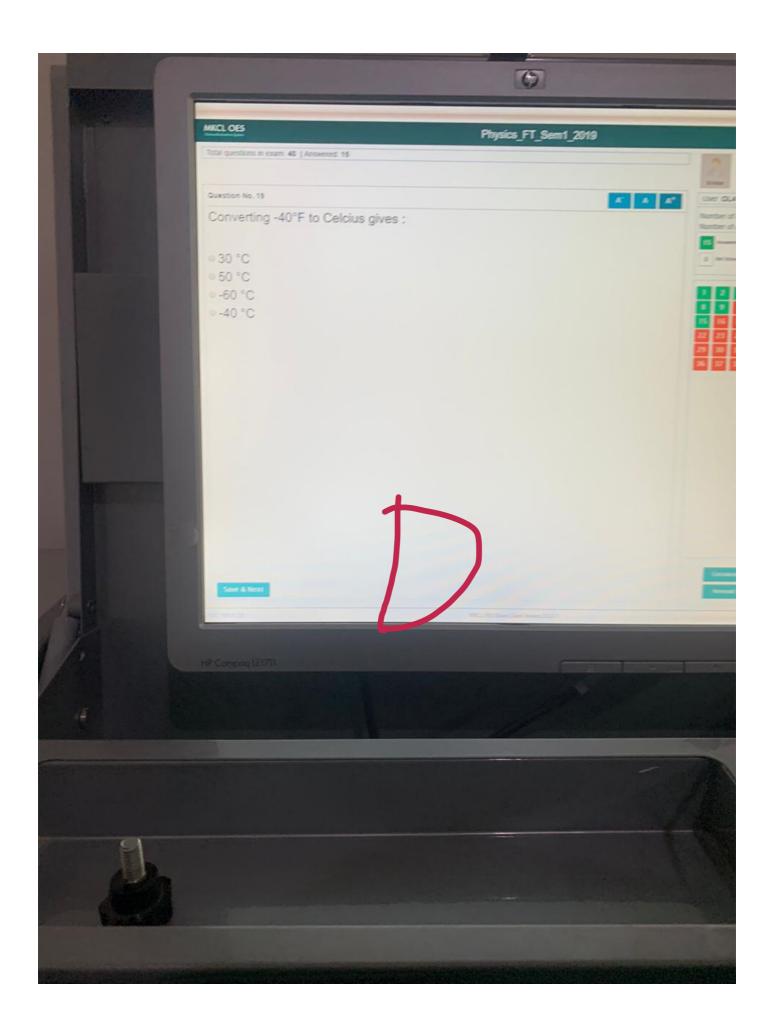
الاسئلة مرتبه من شابتر 3 الى 6

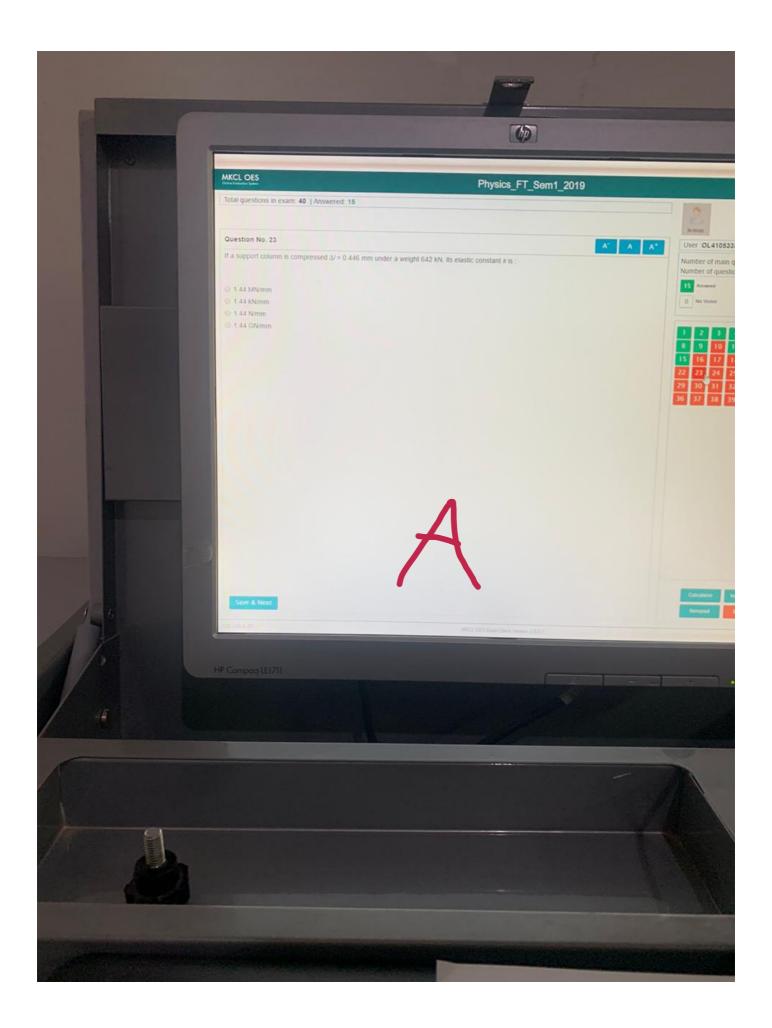
مهما كانت صعوبة الوصول إلى حُلمُك التستسلم، وابقى قويًا الأجل نفسّك والأجل حُلمك الله الله المالة الأجل نفسّك والأجل حُلمك الله المالة المالة

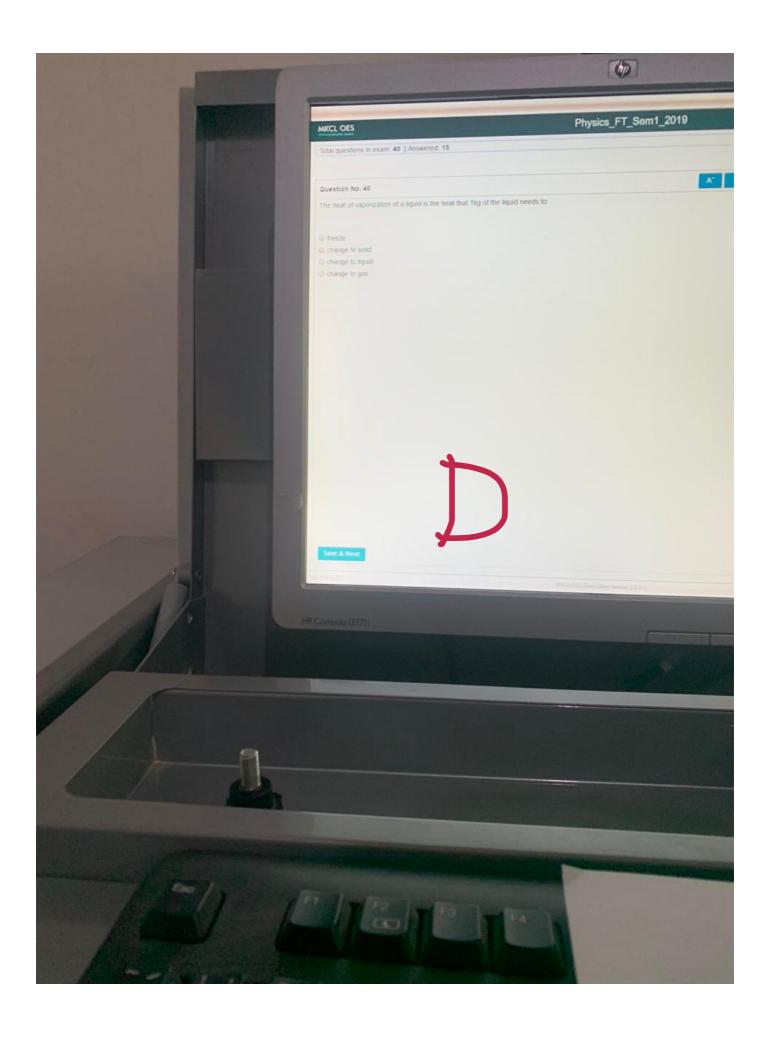
# Chapter 3

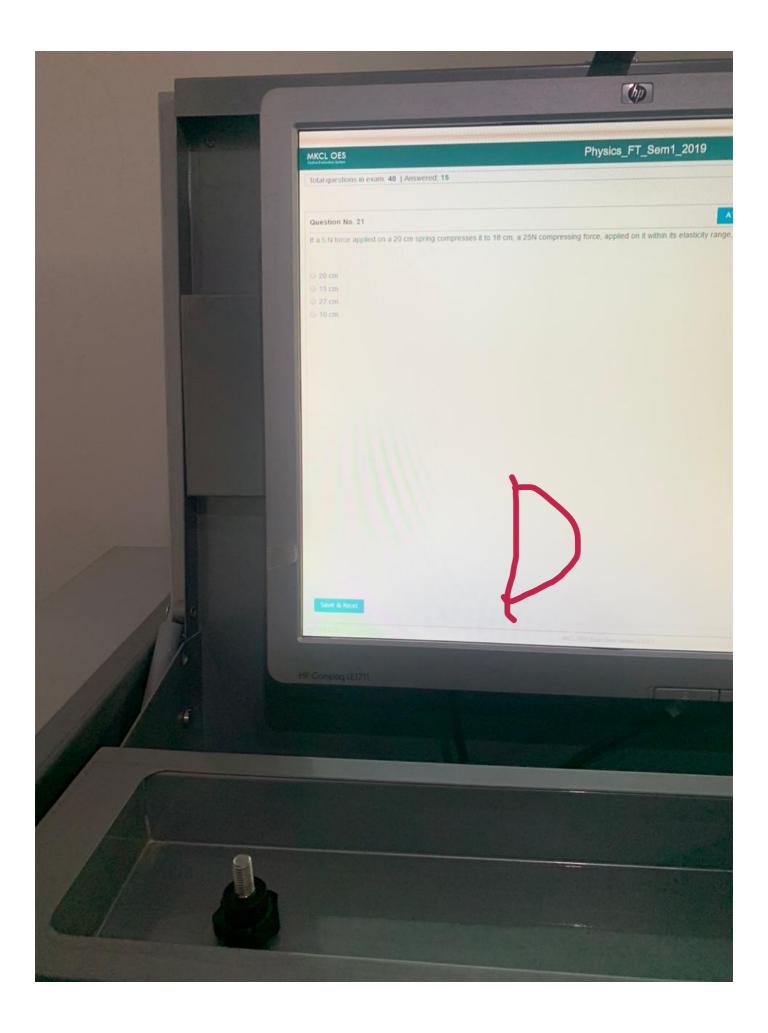
### 77 Question

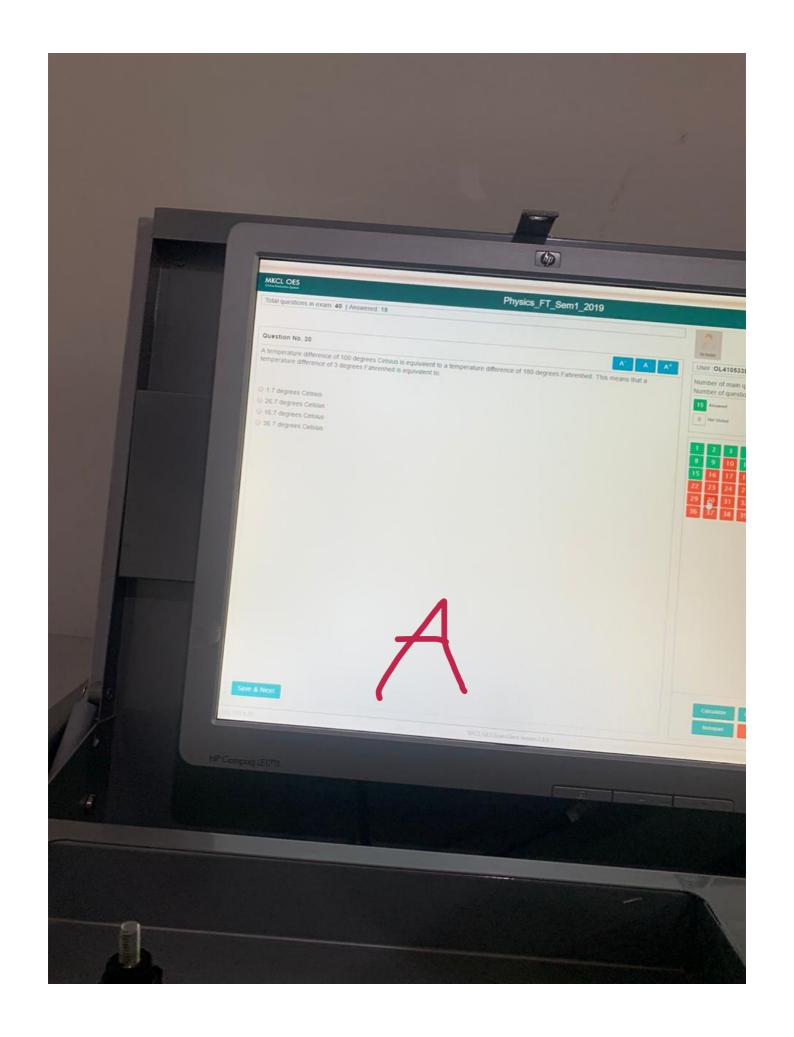


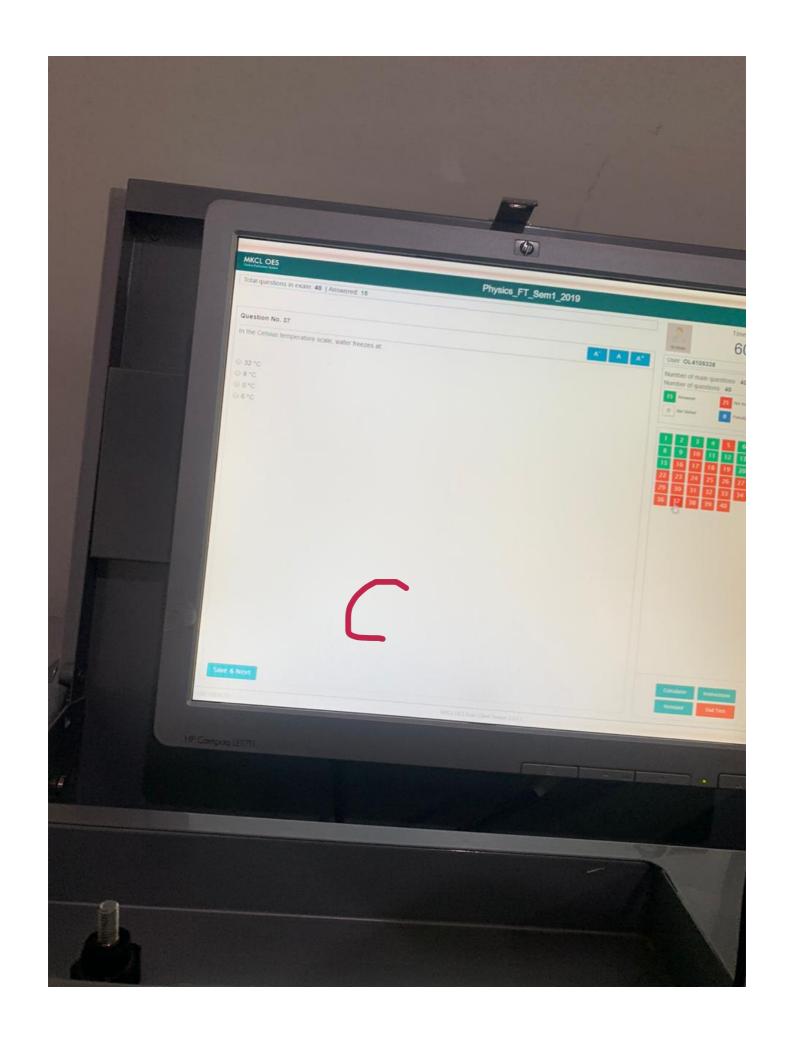


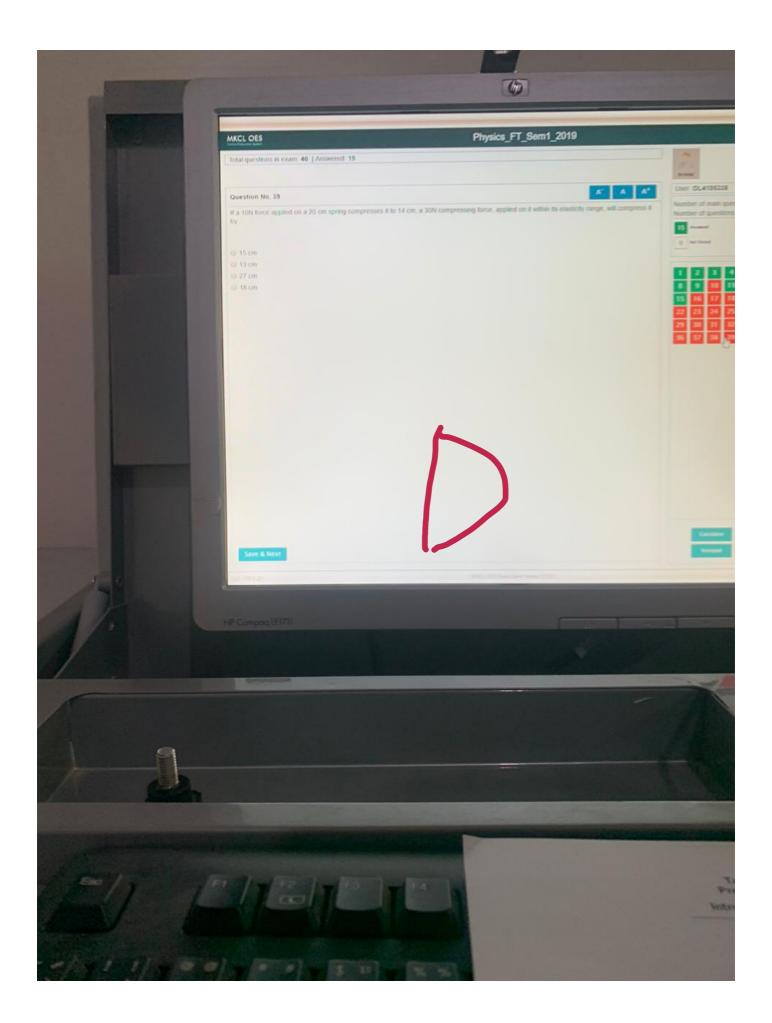












Total questions in exam: 40 | Answered: 0

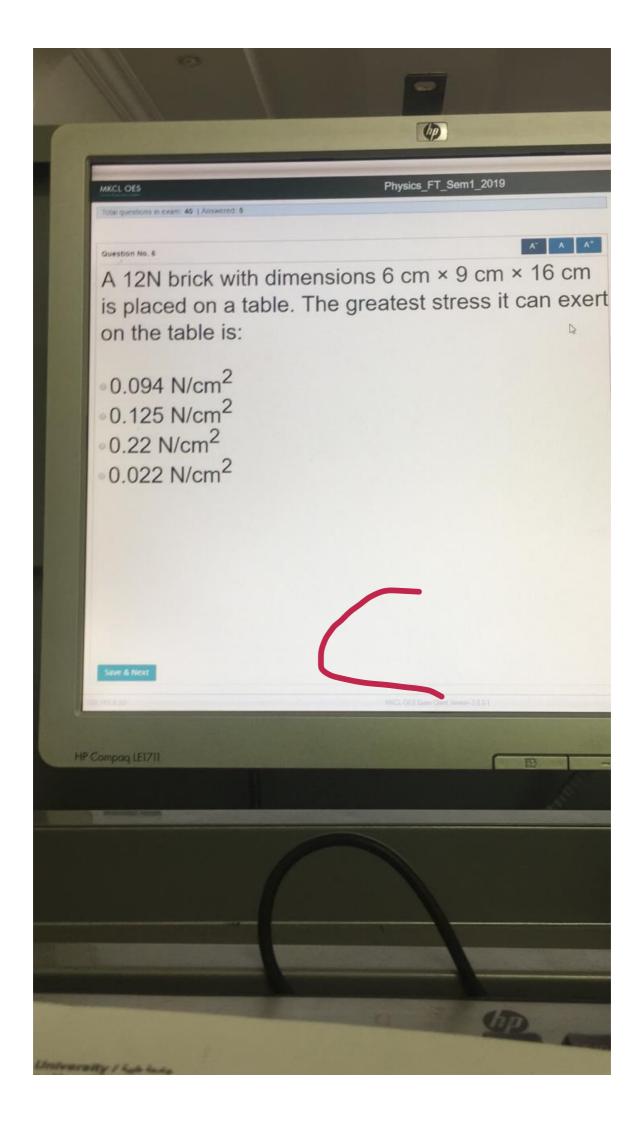
Question No. 18

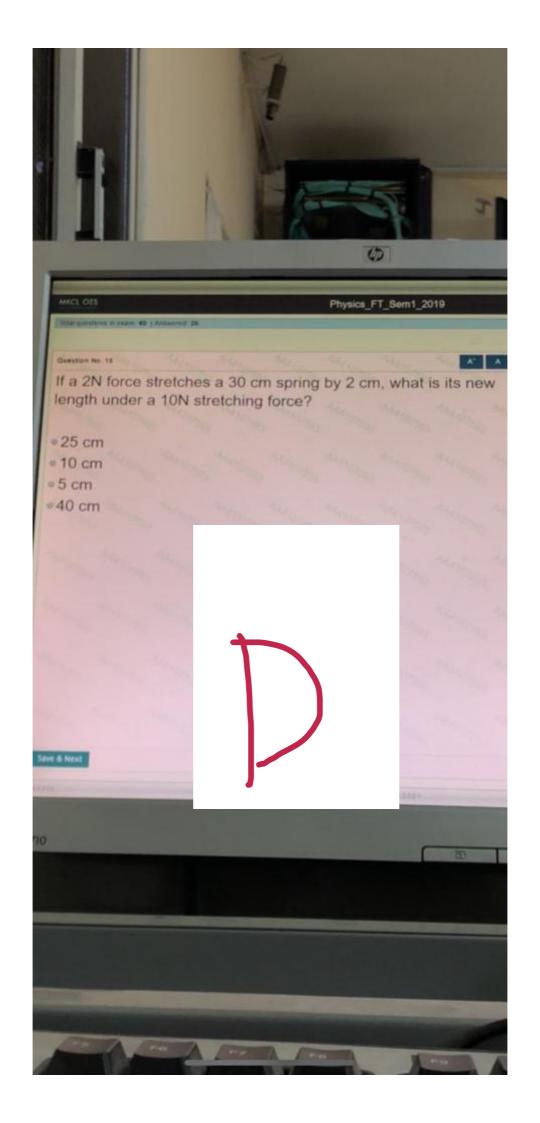
Fusion is the change of phase from

- liquid to gas
- o solid to liquid
- gas to liquid
- Iquid to solid

10

HP Compaq LE1711





### MKCL OES

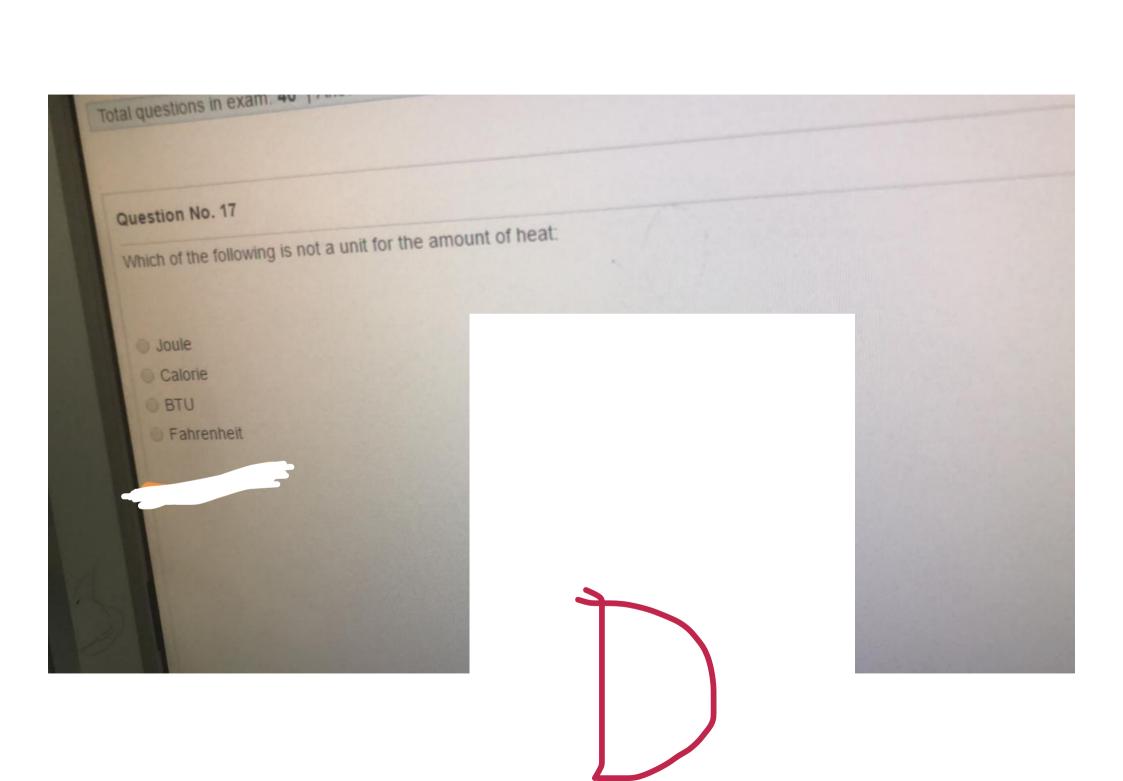
Total questions in exam: 40 | Answered: 0

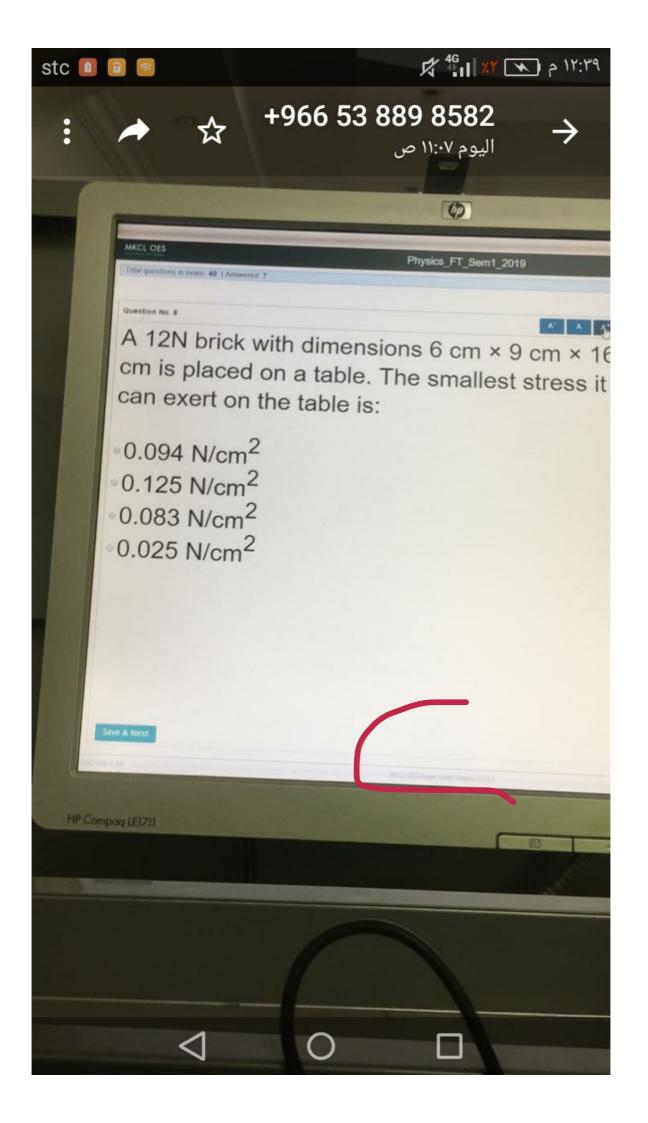
### Question No. 7

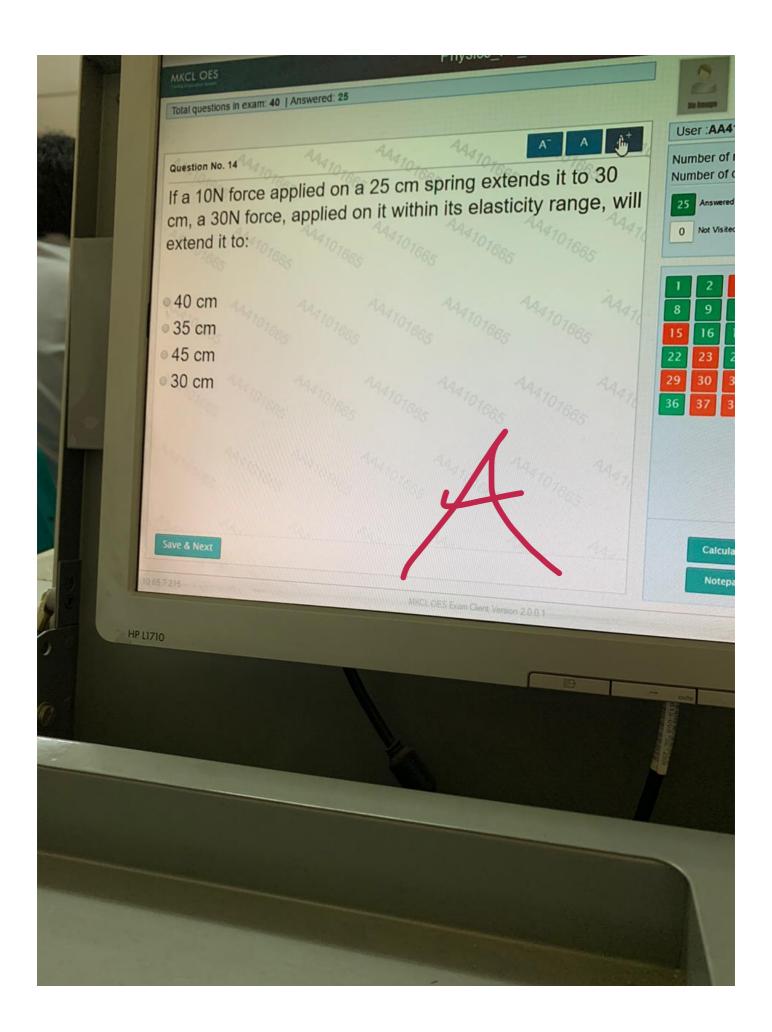
The change of phase from liquid to gas is:

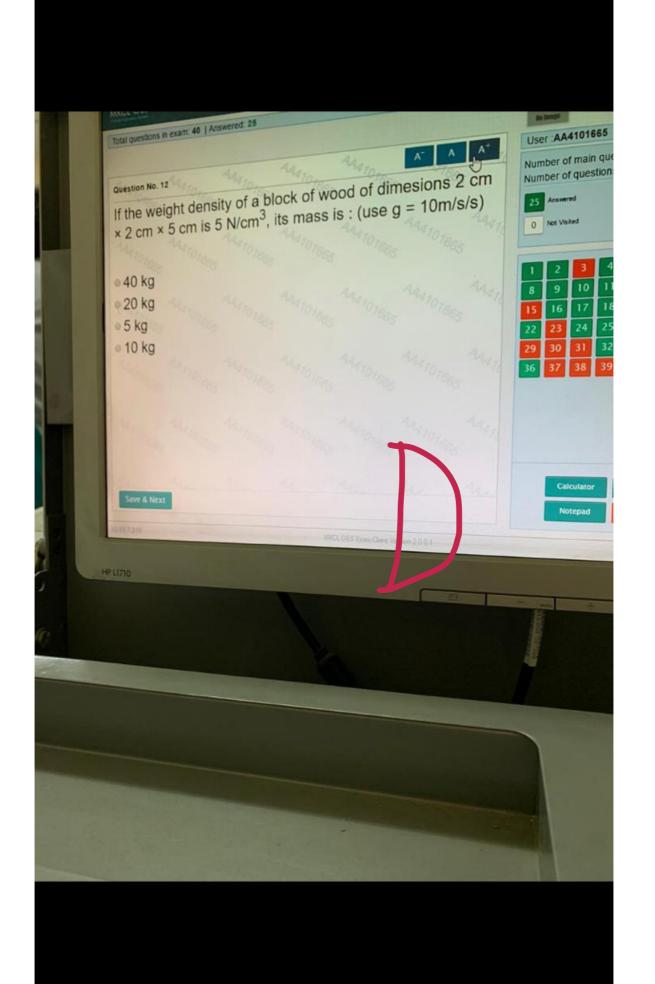
- meiting
- solidification
- condensation
- vaporization

Save & Next







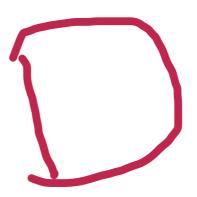


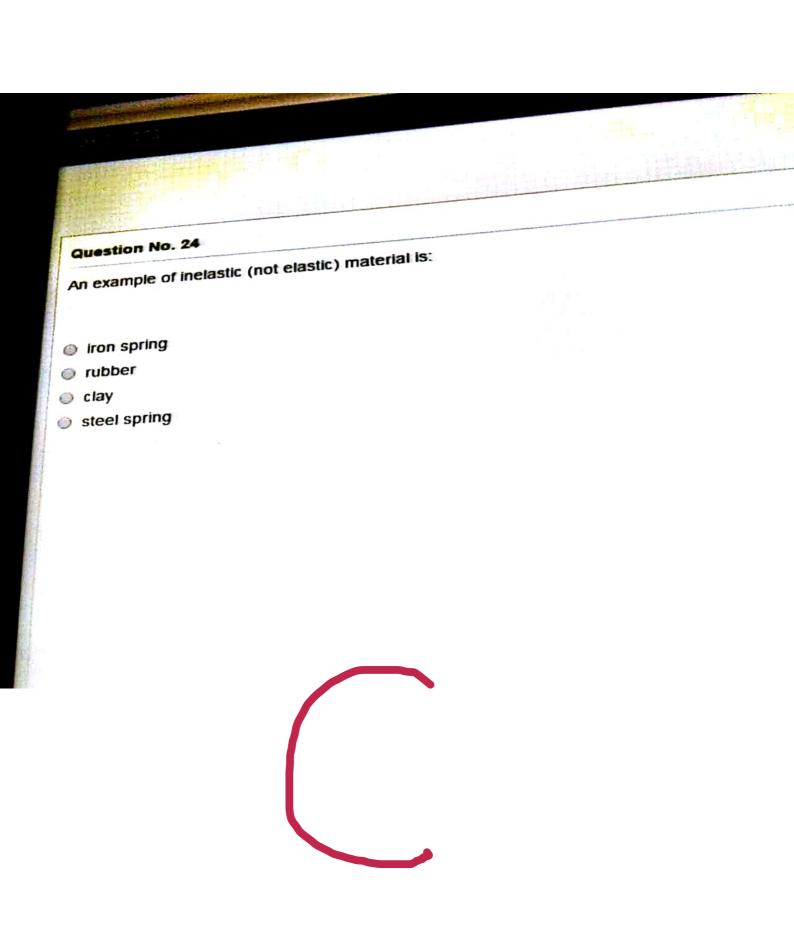
An elastic ball can be made of:

- dough
- rubber
- clay .
- butter

Which of the following cannot be a unit of heat:

- O BTU
- Calorie
- Joule
- Watt

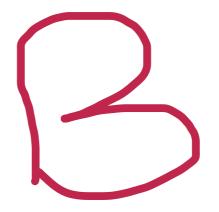




# Ouestion No. 24 If a 2-N force stretches a spring by 5 cm, what force can stretch it by 15 cm? 6 N 4 N 8 N 3 N

A 5-N force applied on a spring of elastic constant k = 0.250-N/cm changes its length by:

- @ 10 cm
- 20 cm
- () 15 cm
- 25 cm



# Question No. 19 The change of phase from liquid to solid is: solidification vaporization condensation melting

# Question No. 20 Condensation is the change of phase from solid to liquid liquid to solid gas to liquid liquid to gas

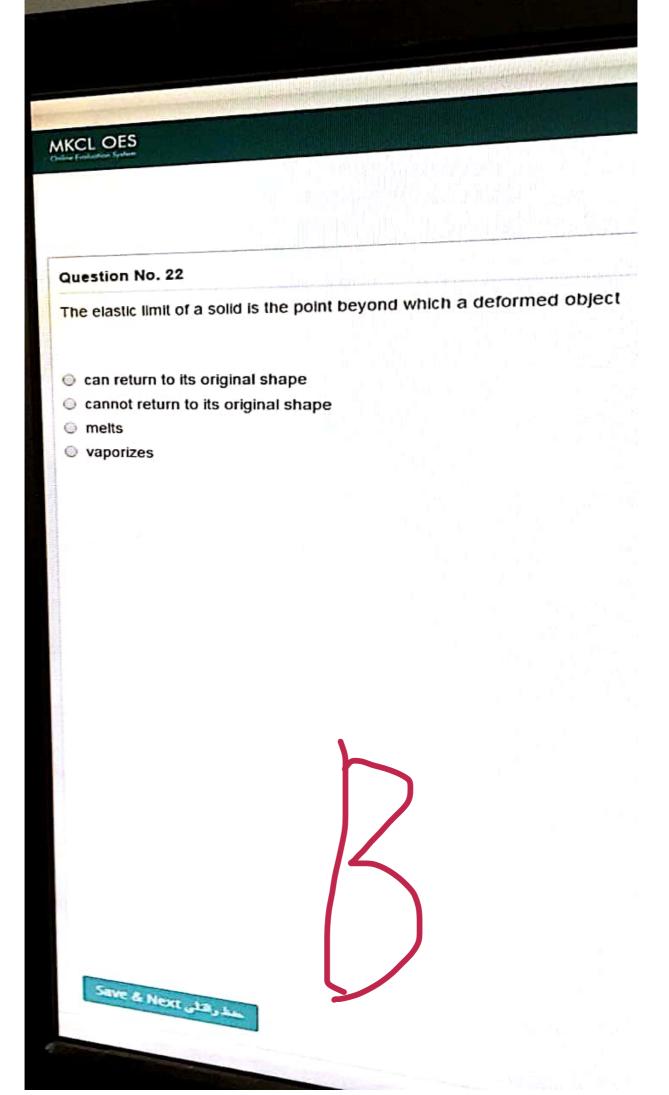


A substance should absorb heat to change from

- gas to solid
- liquid to gas
- liquid to solid
- gas to liquid

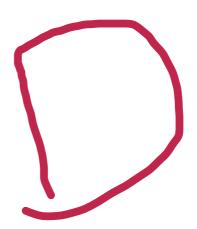


# Question No. 23 A 12-N brick with dimensions 6 cm × 8 cm × 16 cm is placed on a table. The smallest stress it exerts on the table is when it is on the side with dimensions: 8 cm × 16 cm 6 cm × 8 cm 6 cm × 16 cm 9 all answers are correct



in the Kelvin temperature scale, water boils at:

- 00 K
- 273 K
- 212 K
- 373 K





In the Fahrenheit temperature scale, water boils at

- 273 \*F
- 373 •F
- 212 °F
- 100 °F

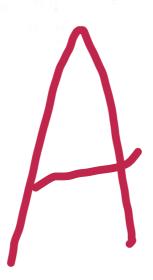


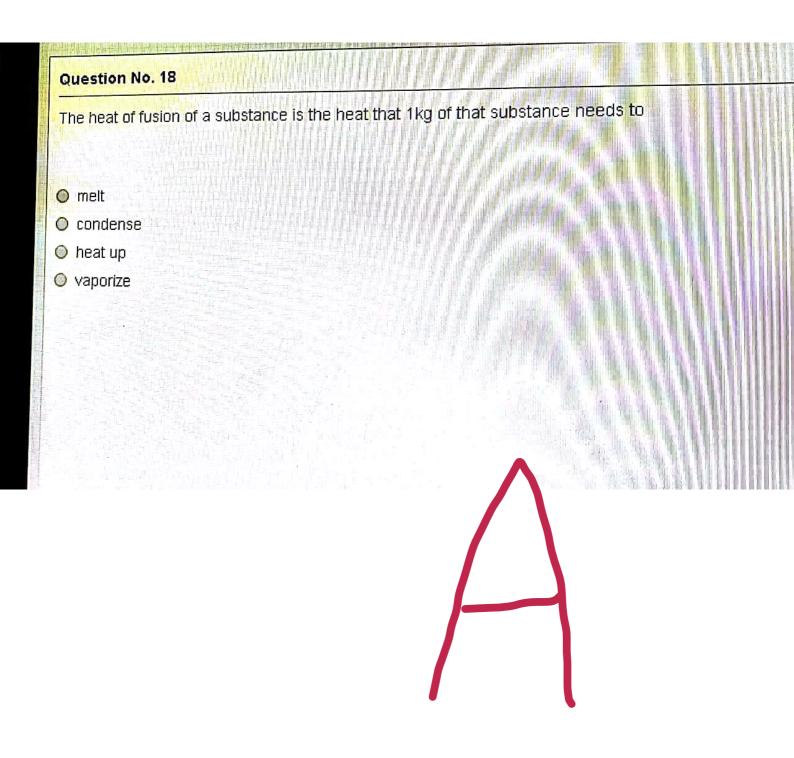
Save & Next , LE, his



The change of phase from liquid to gas is:

- vaporization
- solidification
- condensation
- melting



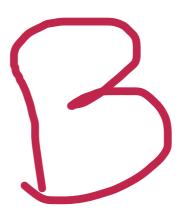


4850 cal of heat is equivalent to:

- 11.2 kJ
- 20.3 kJ
- 33.5 kJ

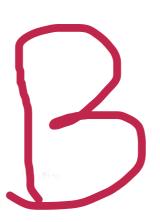
If a 20-N force applied on a 20-cm spring compresses it to 14 cm, a 30-N compressing force, applied on it within its elasticity range, will compress it by:

- 0 17 cm
- 9 cm
- 15 cm
- 13 cm



A substance should lose heat to change from

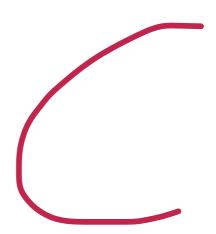
- liquid to gas
- gas to liquid
- solid to liquid
- solid to gas



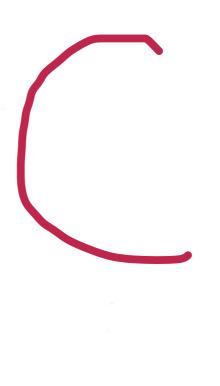
Save & Next مل را13 الم

How many kilo-joules of heat Q must be given off by 15 kg of iron (specific heat =  $481 \text{ J/kg.}^{\circ}\text{C}$ ) to cool from  $105 \text{ to } 55 ^{\circ}\text{C}$ ?

- 111 kJ
- 23 kJ
- 361 kJ
- 17 kJ



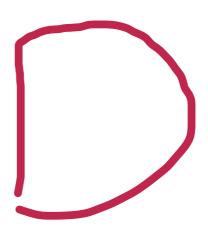
# MKCL OES Question No. 13 The human body average temperature is 98.6 °F. What is it in °C? ○ 373 °C © 310 °C 37 °C 40 °C



عظر قالی Save & Next

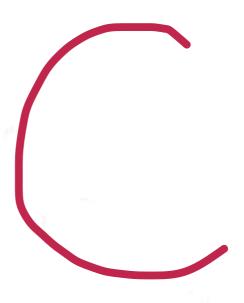
How much heat Q must be absorbed by 10 kg of steel (specific heat =  $0.115 \text{ kcal/kg.}^{\circ}\text{C}$ ) to heat it from zero to  $150 \,^{\circ}\text{C}$ ?

- 751 kcal
- 107 kcal
- 71 kcal
- 173 kcal



Which of the following temperatures is NOT possible?

- → -200 °C
- -278 °C
- -274 °F

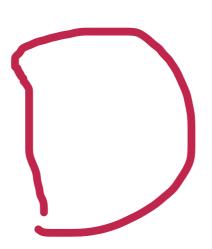


مطرفلی Save & Next

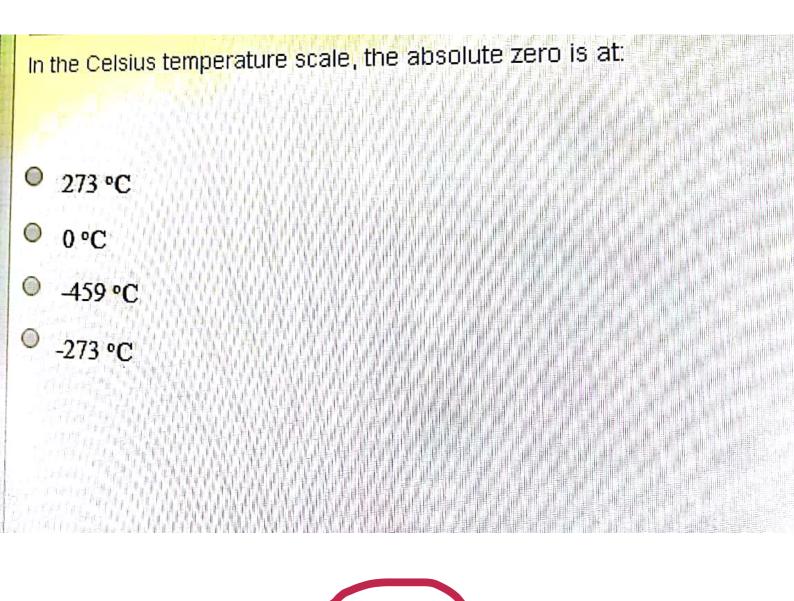
# Question No. 14 A temperature of 50 °F equals: 0 10 K O 323 K 223 K 0 283 K

In the Kelvin temperature scale, water freezes at

- 32 K
- 0 K
- 212 K
- 273 K



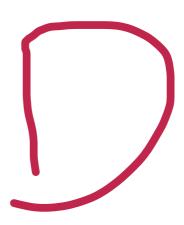
حفظ والذالي Save & Next

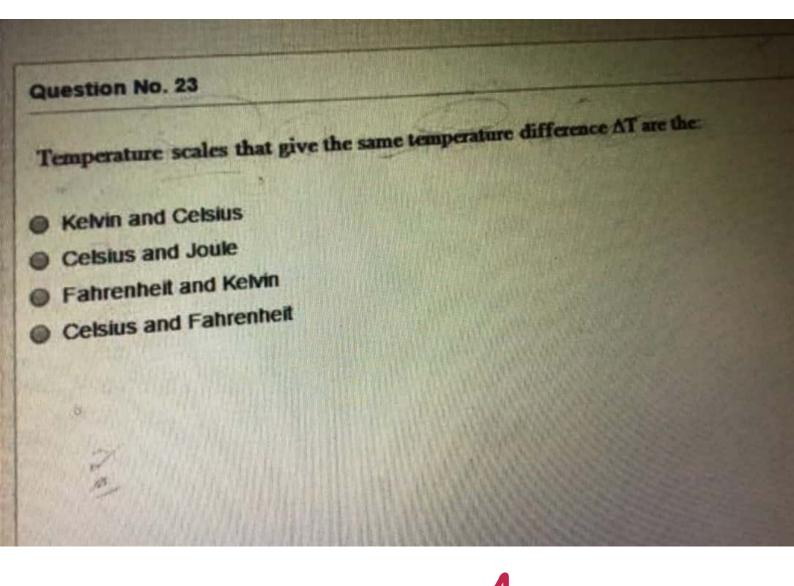


# Question No. 11 In the Celsius temperature scale, water freezes at 32 °C O °C ○ 212 °C 273 °C

## A temperature of 50 °F equals:

- 223 °C
- 50 °C
- 323 °C
- 0 10 °C





A temperature of 30 °C equals:

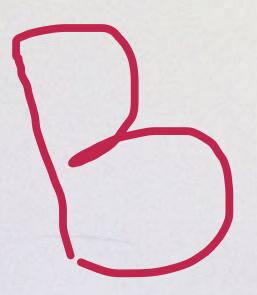
- ◎ 30 °F
- ◎ 2°F
- ◎ 303 °F
- ◎ 86 °F



حنظ را11ي Save & Next

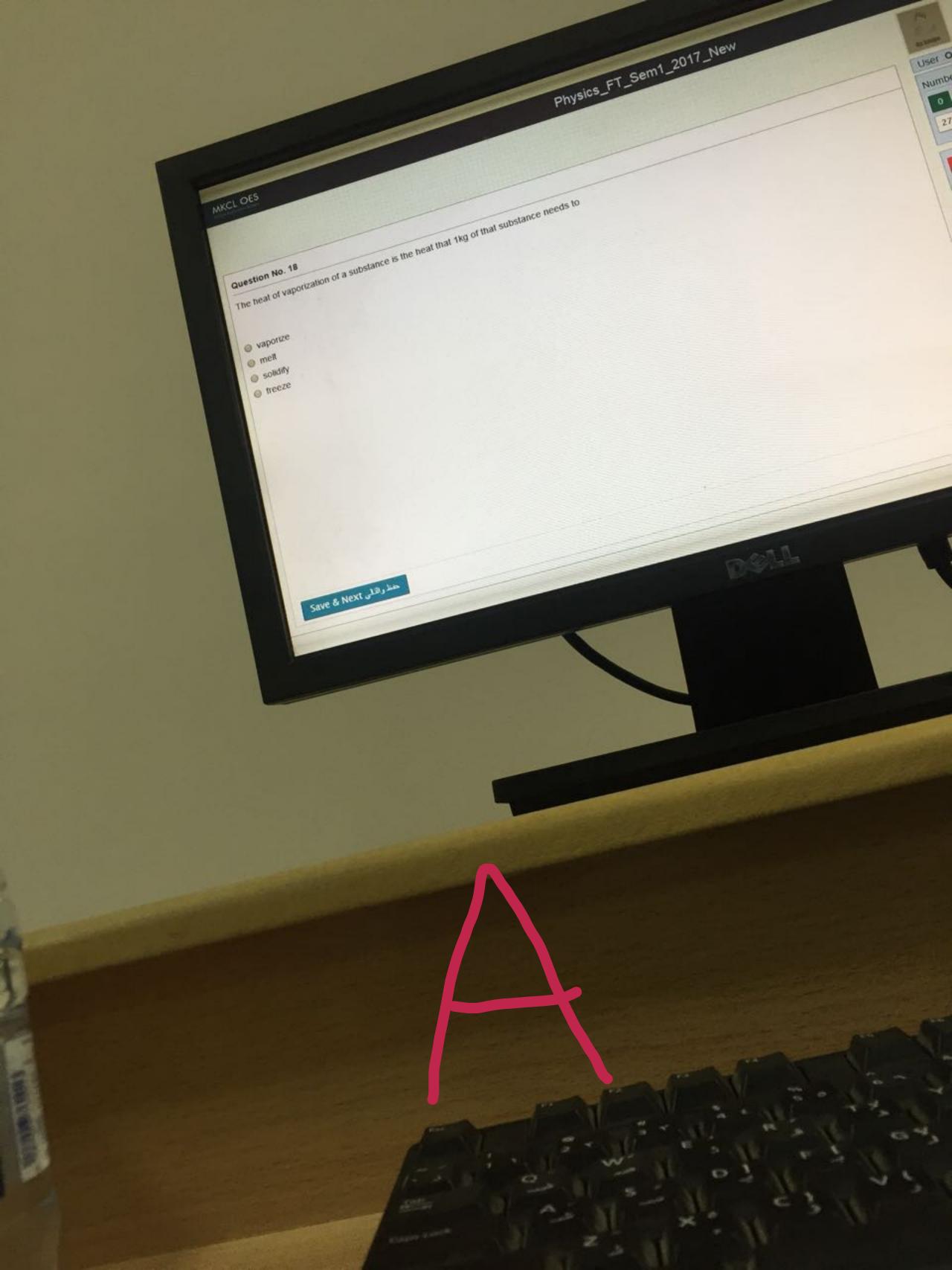
Temperature is measured with a:

- protractor
- thermometer
- o ruler
- micrometer



حنظ رافالي Save & Next

# MXCL OES During change of phase of a substance, its temperature Question No. 21 @ increases o remains constant o changes up and down @ decreases



OES Question No. 21 A substance should lose heat to change from liquid to solid solid to gas Solid to liquid liquid to gas Save & Next Lals Lie HP Compaq LEIZII

A 12-N brick with dimensions 6 cm × 8 cm × 16 cm is placed on a table. The greatest stress it exerts on the table is vidimensions:

- all answers are correct
- 6 cm × 8 cm
- 6 cm × 16 cm
- @ 8 cm × 16 cm



مطراقلی Save & Next

HP Compaq LE1711

If a 2-N force stretches a 30-cm spring by 1 cm, what is its new length under a 10-N stretching force?

- ⊚ 35 cm
- 25 cm
- 10 cm
- 5 cm

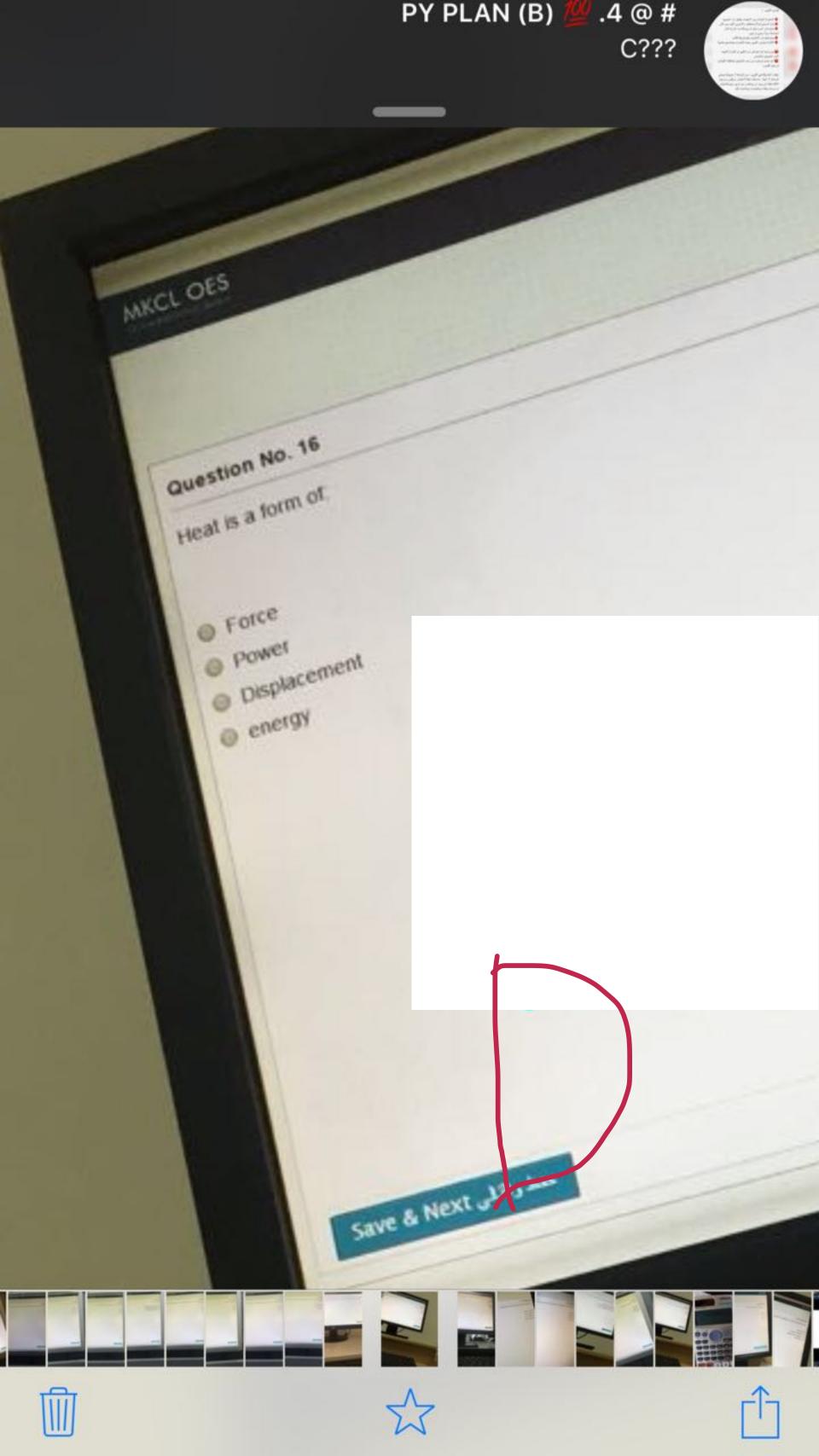
save & Next منظر الثاني

Out 52 02 No. 18 The charge of phase from gas to know it. O CONDENSATION O SONOTE MER o retry O ABOUTAGE

5-kg of a liquid absorb an amount of heat Q=200 kcal, raising its temperature by  $\Delta T=40$ °C. The

- $\circ$  c = 0.5 kcal/kg. $\circ$ C
- $\odot$  c = 0.1 kcal/kg.°C
- $\odot$  c = 0.3 kcal/kg. $^{\circ}$ C
- ◎ c = 1 kcal/kg.°C

مطرقال Save & Next



Total questions in exam: 40 | Answered: 0

# Question No. 1

1

If the weight density of a block of wood of dimensions  $2 \text{ cm} \times 2 \text{ cm} \times 5 \text{ cm}$  is  $10 \text{ N} / \text{cm}^3$ , its mass is

- 20 kg
- 30 kg
- 10 kg
- 40 kg

Save & Next Lilly his

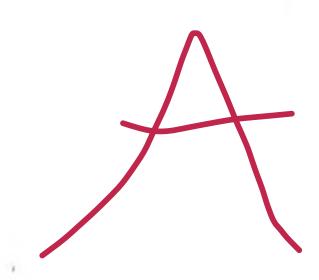
Question No. 12 When a 12-N brick is placed on a table with contact area of 96 cm<sup>2</sup>, the stress it exerts on the table is: 0.125 N/cm<sup>2</sup> 0.25 N/cm<sup>2</sup> 0.025 N/cm<sup>2</sup> 0.094 N/cm<sup>2</sup>

Total questions in exam: 40 | Answered: 2

# Question No. 36

The weight density of a 10-kg block of wood of dimensions 1 cm × 2 cm × 5 cm is:

- 0 10 N/cm<sup>3</sup>
- 20 N/cm³
- 000 N/cm<sup>3</sup>
- 0 1 N/cm3



A 50-cm spring has an elastic constant k = 0.50-N/cm. If a 10-N force is applied on it within its establishy range, its new length would be:

- 70 cm
- @ 40 cm



Total questions in exam: 40 | Answered: 2

# Question No. 31

A temperature difference of 100 degrees Celsius is equivalent to a temperature difference of 180 degrees Fahrenheit. This mean

- 5 degrees Fahrenheit
- 18 degrees Fahrenheit
- 9 degrees Fahrenheit
- 20 degrees Fahrenheit

The change of phase from liquid to solid is:

- condensation
- solidification
- melting
- vaporization



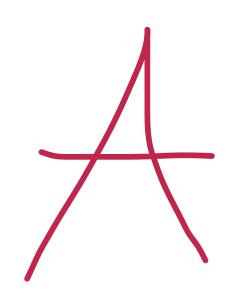
One kilocalorie is the amount of heat that increases the temperature of 1 kg of water by:

1°C

O 10 K

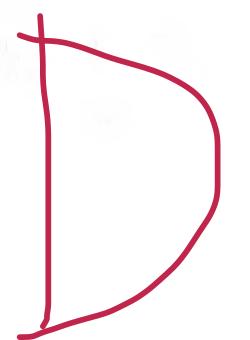
○ 32 °F

O 273 K



A temperature difference of 100 degrees Celsius is equivalent to a temperature difference of 160 degrees Fahrenheit. This means that a temperature difference of 36 degrees Fahrenheit is equivalent to:

- 18 dégrees Celsius
- 36 dégrees Celsius
- 10 degrees Celsius
- 20 degrees Celsius

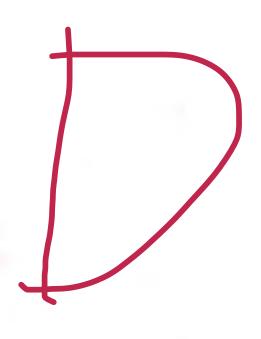


In the Fahrenheit temperature scale, the absolute zero (0 K) is approximately at:

- 273 °F
- 0 °F
- 460 °F
- -273 °F

The heat of fusion of a substance is the heat that 1kg of that substance needs to

- condense
- O heat up
- vaporize
- o mett



Total questions in exam: 40 | Answered: 2

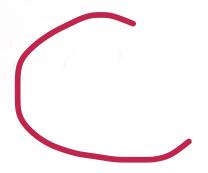
# Question No. 31

A temperature difference of 100 degrees Celsius is equivalent to a temperature difference of 180 degrees Fahrenheit. This mean

- 5 degrees Fahrenheit
- 18 degrees Fahrenheit
- 9 degrees Fahrenheit
- 20 degrees Fahrenheit

A temperature difference of 100 degrees Celsius is equivalent to a temperature difference of 180 degrees Fahrenheit. The temperature difference of 75 degrees Celsius is equivalent to

- 25 degrees Fahrenheit
- 20 degrees Fahrenheit
- 135 degrees Fahrenheit
- 75 degrees Fahrenheit



5-kg of a liquid absorb an amount of heat Q = 200 kcal, raising its temperature by  $\Delta T = 40$ °C. The specific heat c of this liquid is:

$$c = 0.5 \text{ kcal/kg.}^{\circ}\text{C}$$

Q = cm At

$$C = \frac{200}{5 \times 40} = 1 \text{ Kcal/kg.°C}$$

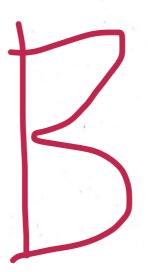


Save & Next and a land

Scanned by CamScanner

In the Celsius temperature scale, water boils at:

- 273 °C
- 100 °C
- <sup>⊙</sup> 373 °C
- 212 °C



Scanned by CamScanner

# Question No. 12 In the Fahrenheit temperature scale, water freezes at: 273 °F 0°F 212°F 32 °F

Scanned by CamScanner

# A temperature of 300 K equals:

$$T_{K} = T_{C} + 273$$

$$T_C = T_K - 273$$



When a deforming force acts on an inelastic (not elastic) object and then removed, the object:

- gets more mass
- is deformed for a short time
- o does not change
- O does not return to its original shape



مطراقلي Save & Next

Scanned by CamScanner

If a 20-N force applied on a 20-cm spring extends it to 24 cm, a 30-N force, applied on it within its elasticity range, will extend it by:

هناطالبه قدايش هذي السفوه أرح دَخله الناسف يتمدد

- 0 6 cm
- 0 10 cm
- Q 22 cm
- 36 cm

 $20N \longrightarrow 4 cm$   $30N \longrightarrow 6 cm$ 



Save & Next , all , has

Scanned by CamScanner

If a 10-N force applied on a 20-cm spring compresses it to 18 cm, a 25-N compressing force, applied on it within its elasticity range, will compress it

20 cm 100 18 cm

20 cm = 250 15 cm

O 15 cm

O 18 cm

O 20 cm

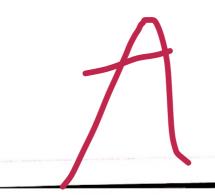
**O** 27 cm

1cm clei 2/ نوت 5 slies \_\_\_\_ 2cm rei 10N

5 cm veins e - mit out leis 25 11

20 cm - 5 cm = 15 cm

معلى الكلي Save & Nexi



Scanned by CamScanner

When a deforming force acts on an elastic object within its elastic range and then removed, the object

- o returns back to its original shape
- does not return to its original shape
- gets more mass
- O breaks down



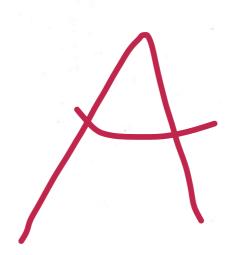
Save & Next with Jan

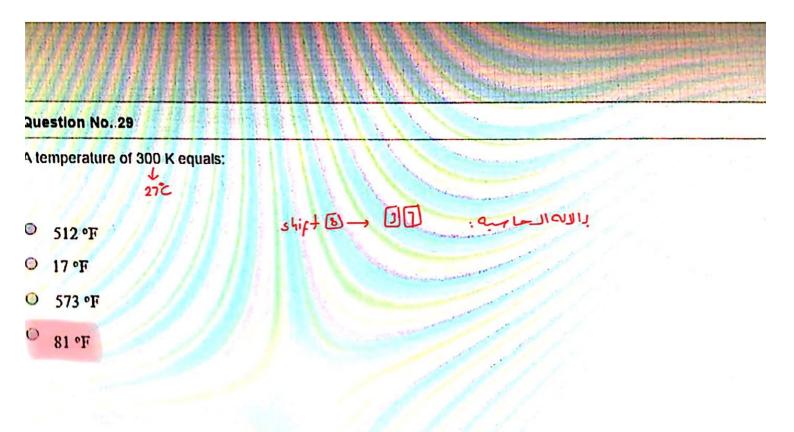
Scanned by CamScanner

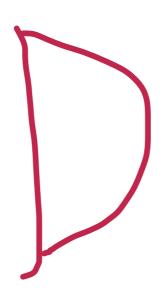
| A  | 4   |     |     | -  |
|----|-----|-----|-----|----|
| Qu | gst | ion | No. | 29 |

Temperature is a measure of the \_\_\_\_\_ an object:

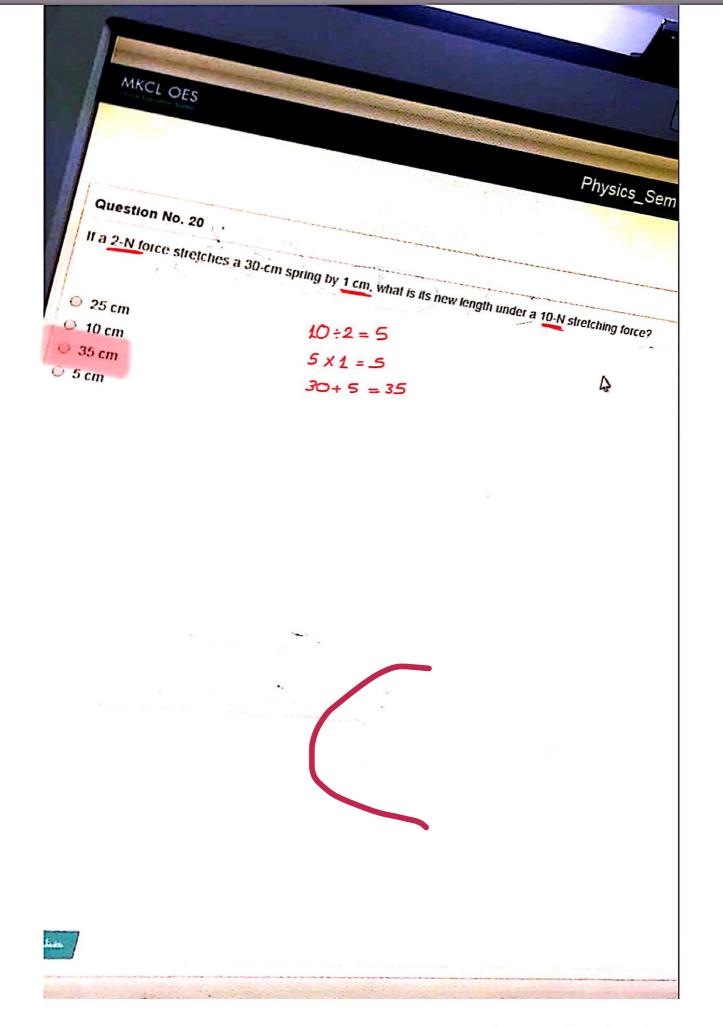
- hotness or coldness of
- o area of
- volume of
- ocolor of



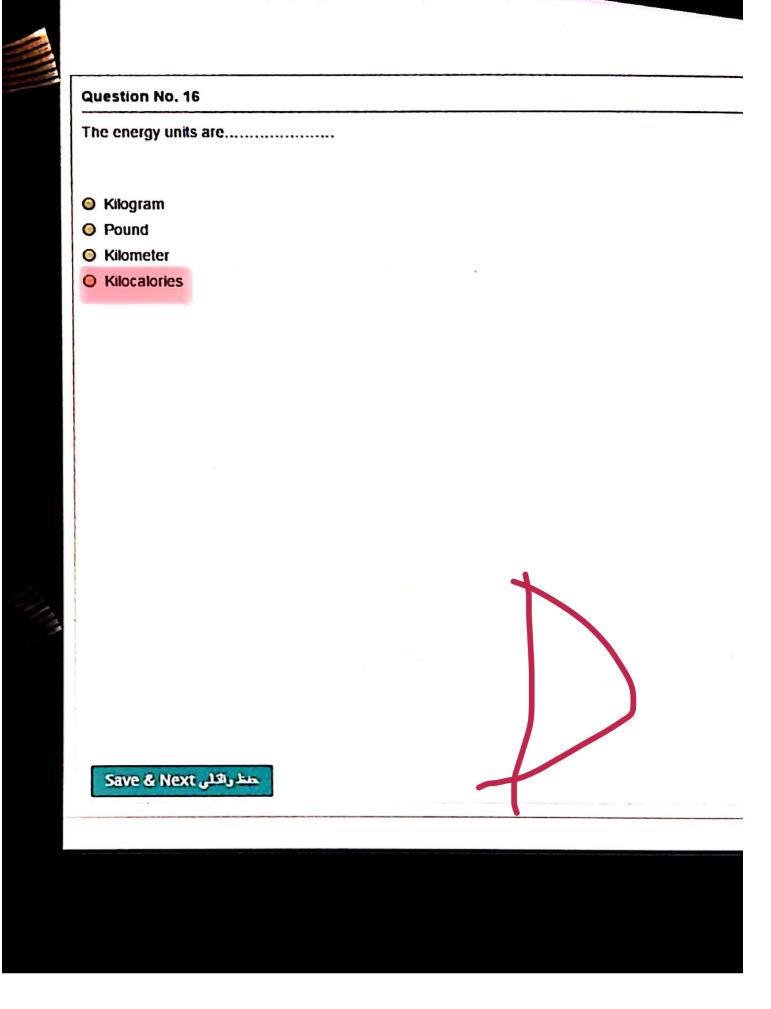




Scanned by CamScanner



Scanned by CamScanner

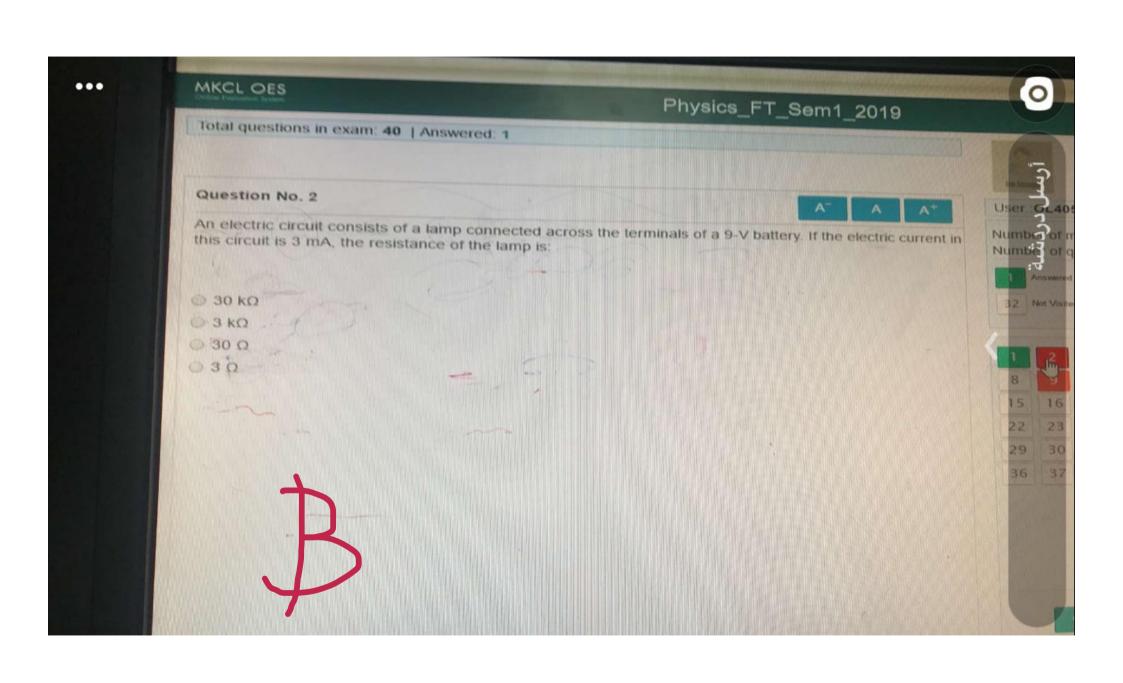


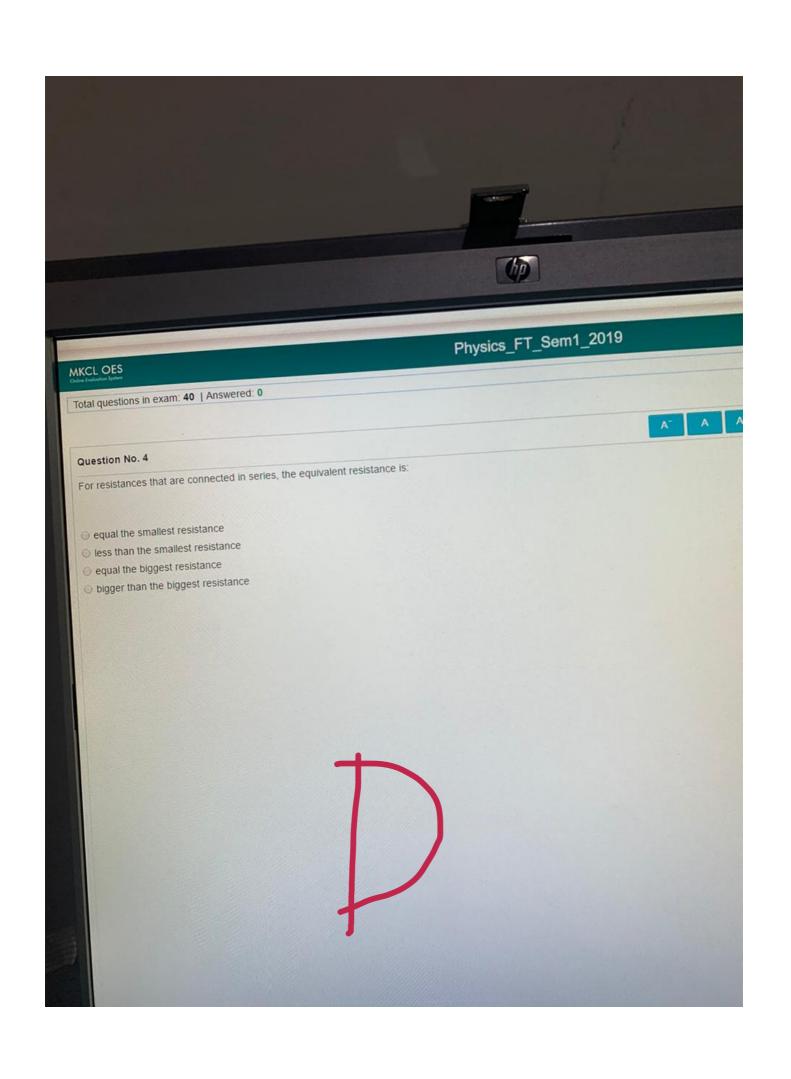
Scanned by CamScanner

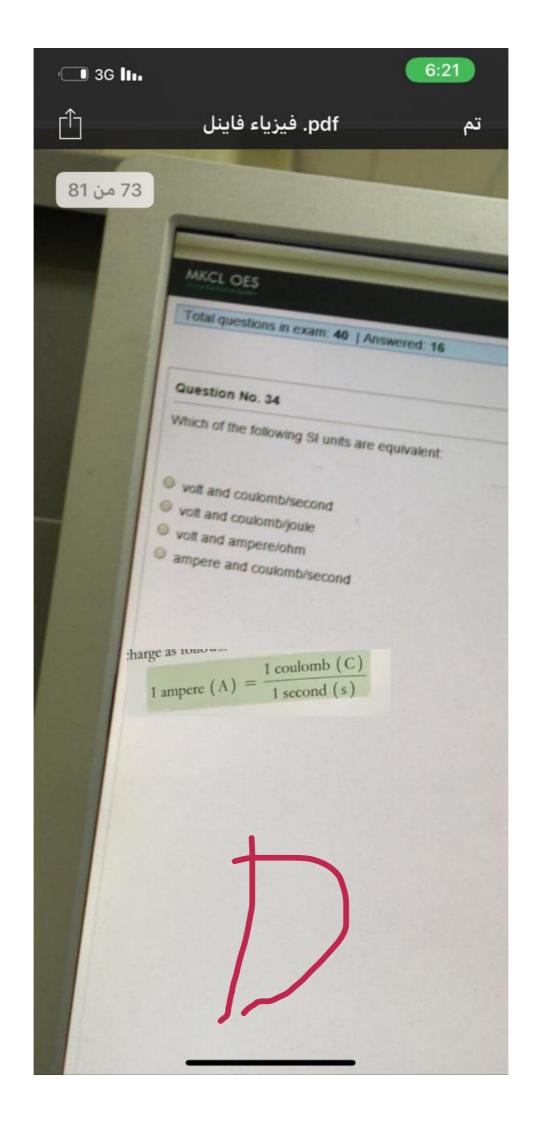
# Chapter 4

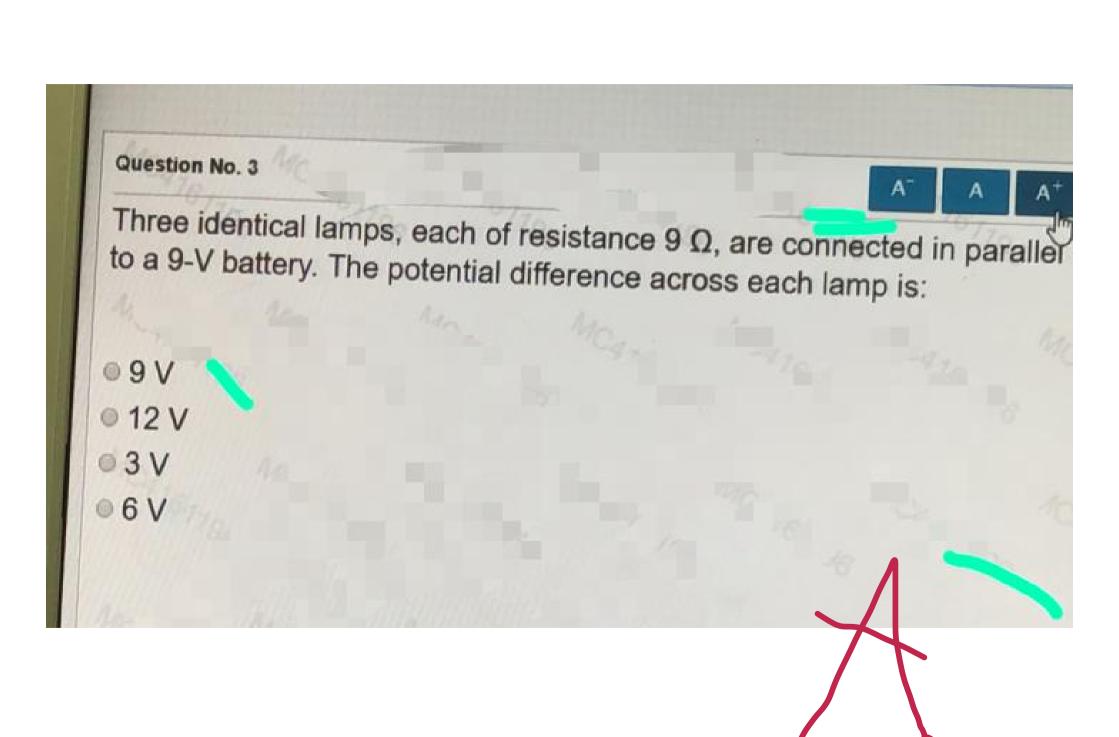
# 55 Question

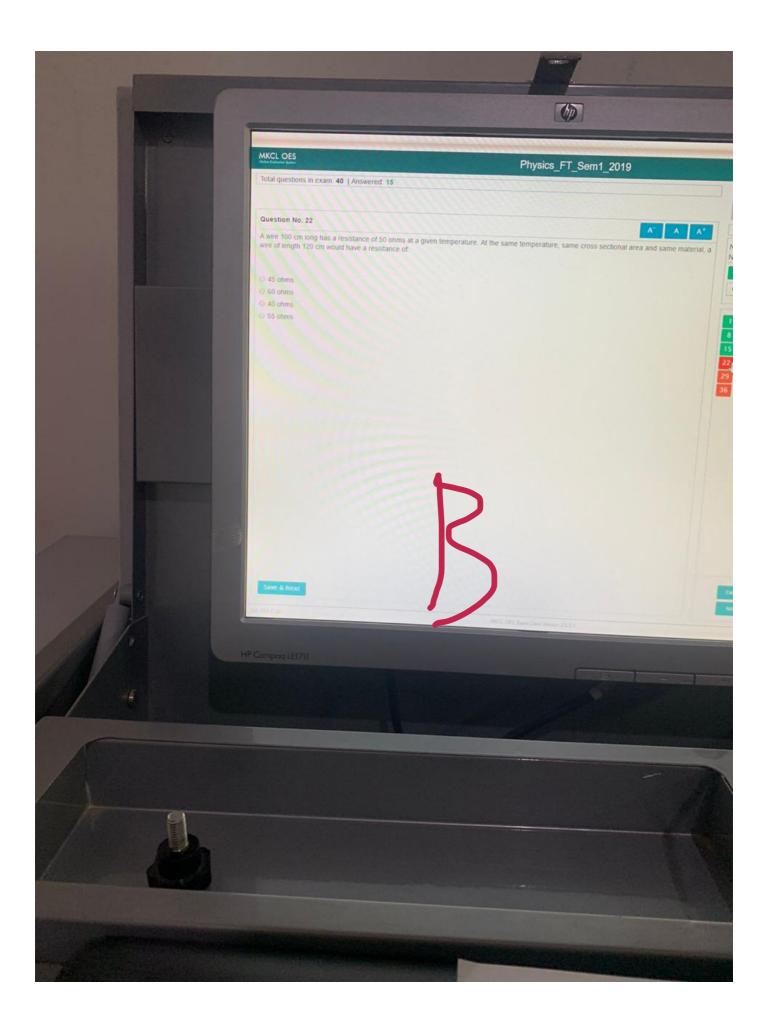
أحسِن نيتًك يُحسن الله حَالك وتمنّى الخَيرِ لغيرِك يأتِيك الخَيرِ لغيرِك يأتِيك الخَيرِ مِن حيث لاتحتَسّب ﴿ ﴿ ﴾.

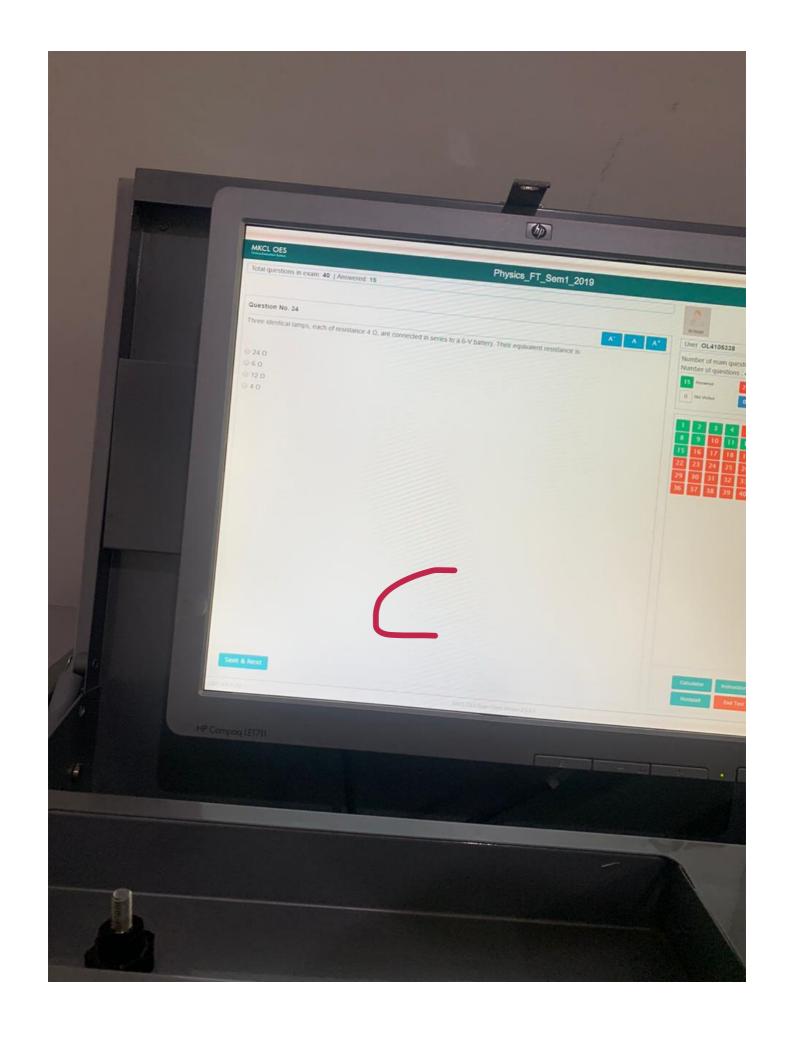


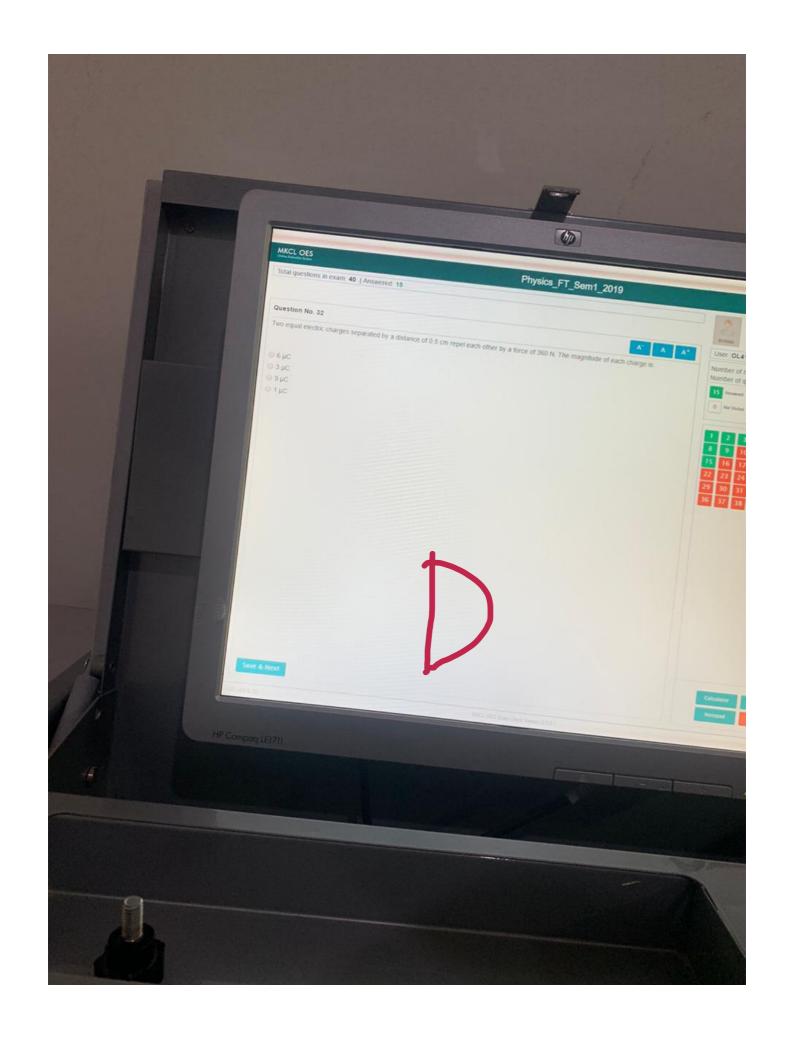


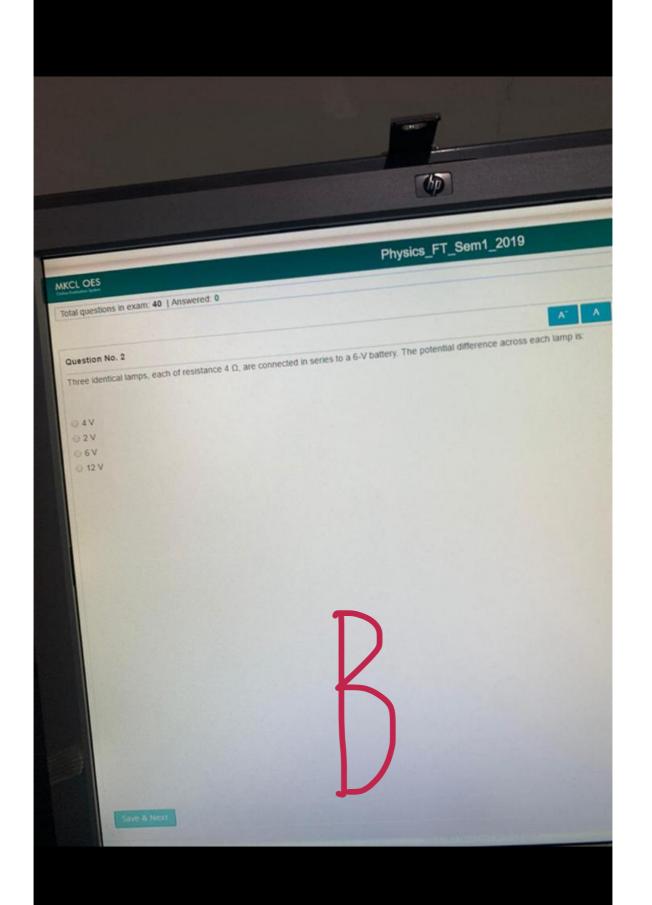








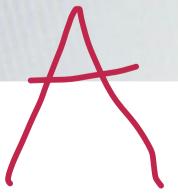


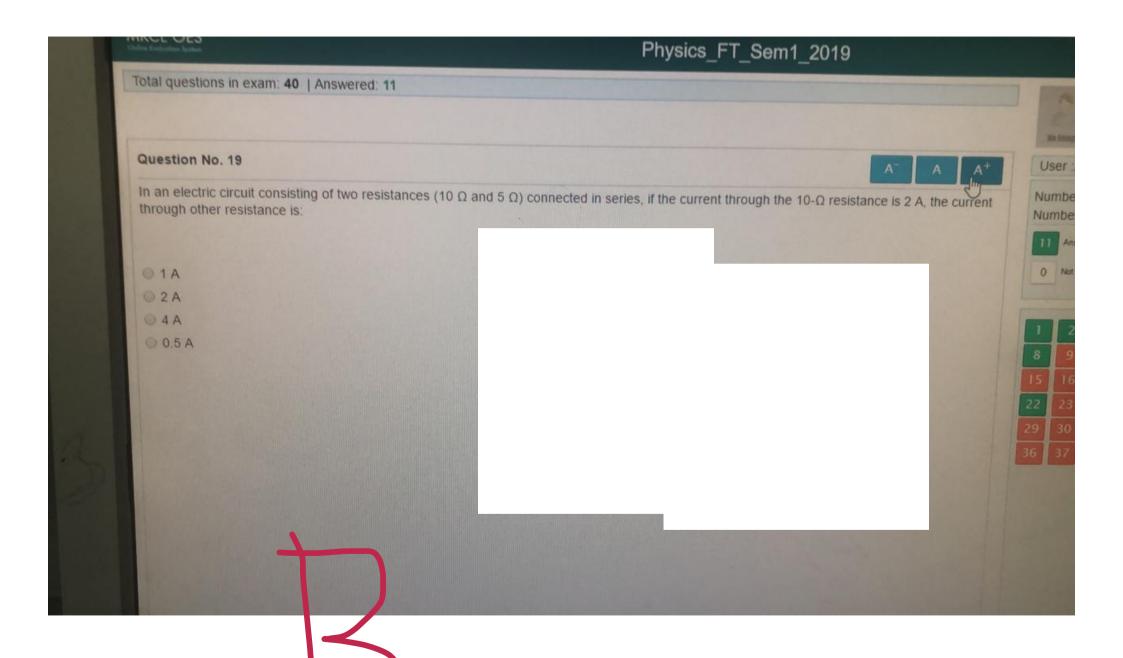


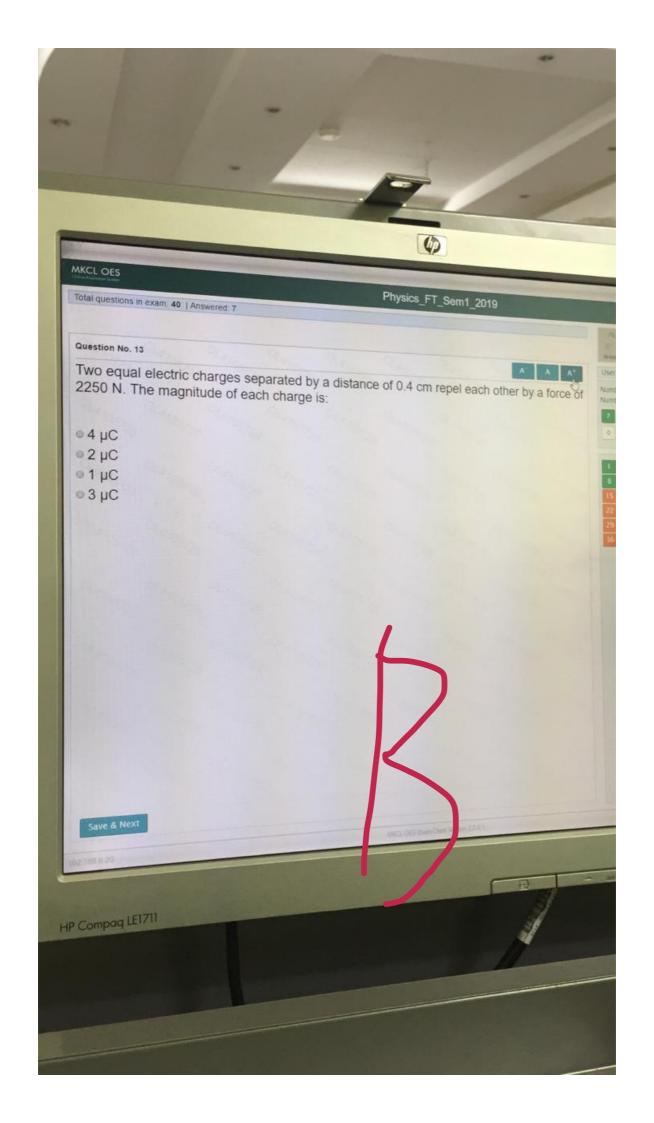


An iron is rated at 550 W. How much would it cost to operate it for 60 h at

- SAR 5.94
- SAR 0.17
- SAR 16
- SAR 59.4







Question No. 36

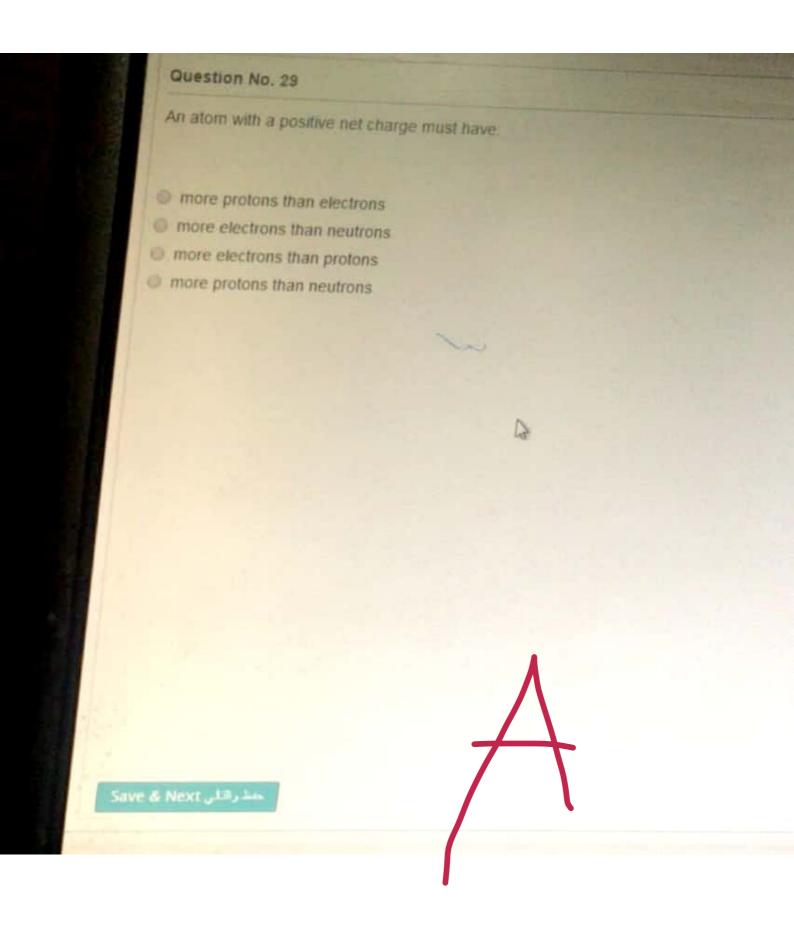
An iron is rated at 550 W. How much would it cost to operate it for 60 h at SAR0.05/kWh?

SAR 16.5

SAR 0.17

SAR 16

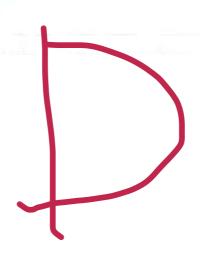




Three identical lamps, each of resistance  $9 \Omega$ , are connected in parallel to a 9-V battery. The current passing through each lamp is

- 3 A
- 9 1/3 A
- 9 3/3 A
- 0 1 A

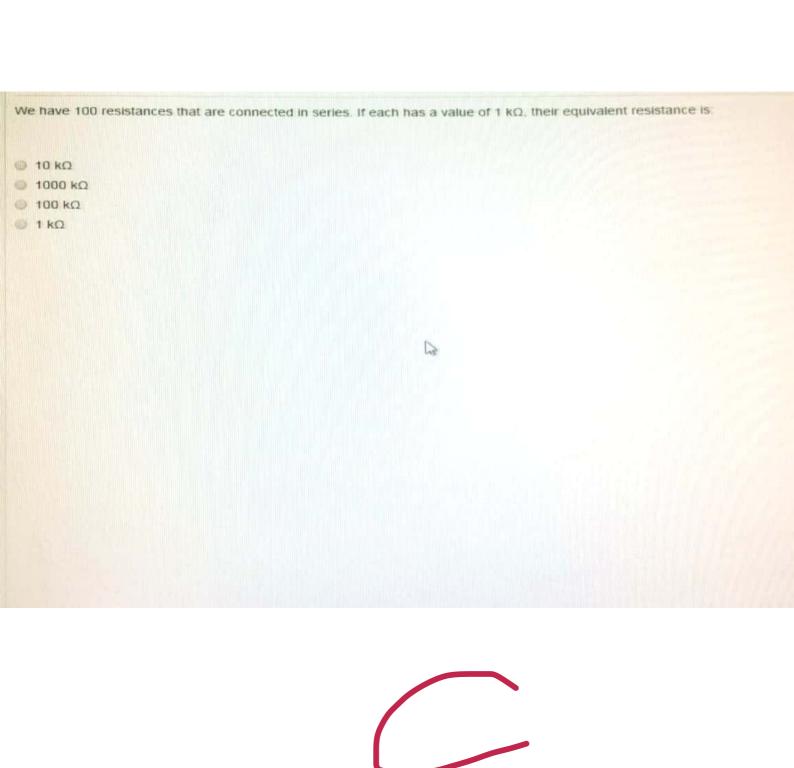
and واقتار Save & Next



The repulsive force between two identical 1-mC charges separated by 300 m is:

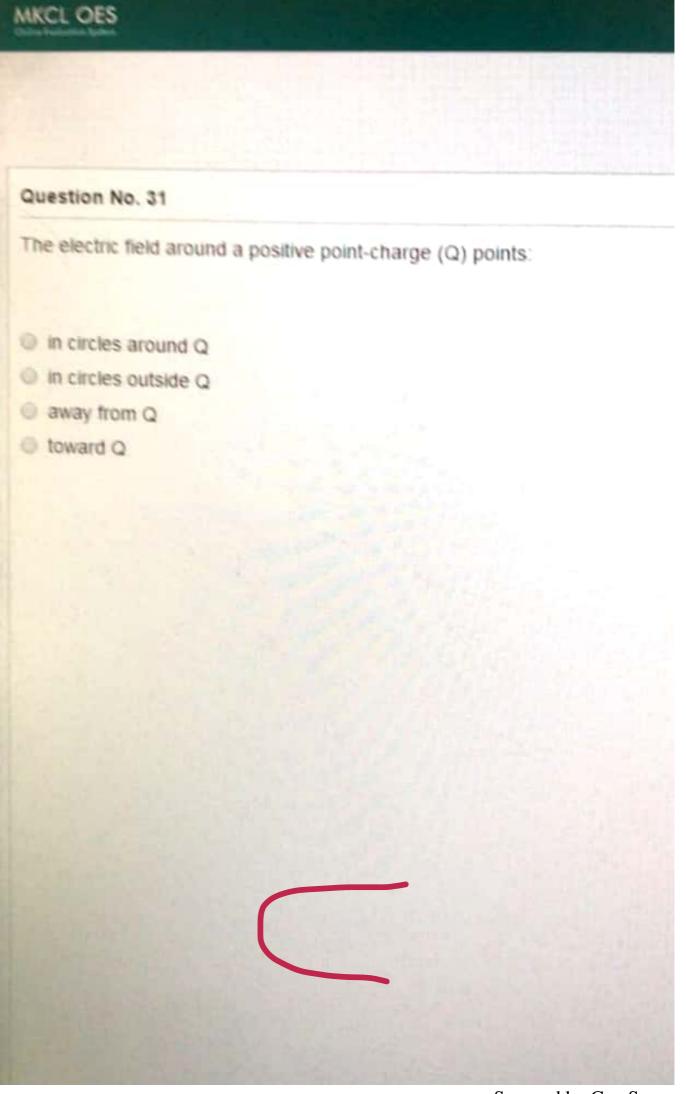
- 0 100 N
- 10 N
- 0.1 N
- 1 N

حنظ والثالي Save & Next



The equivalent resistance of two resistances connected in parallel is 40  $\Omega$ . If one of them is 80  $\Omega$ , the other is:

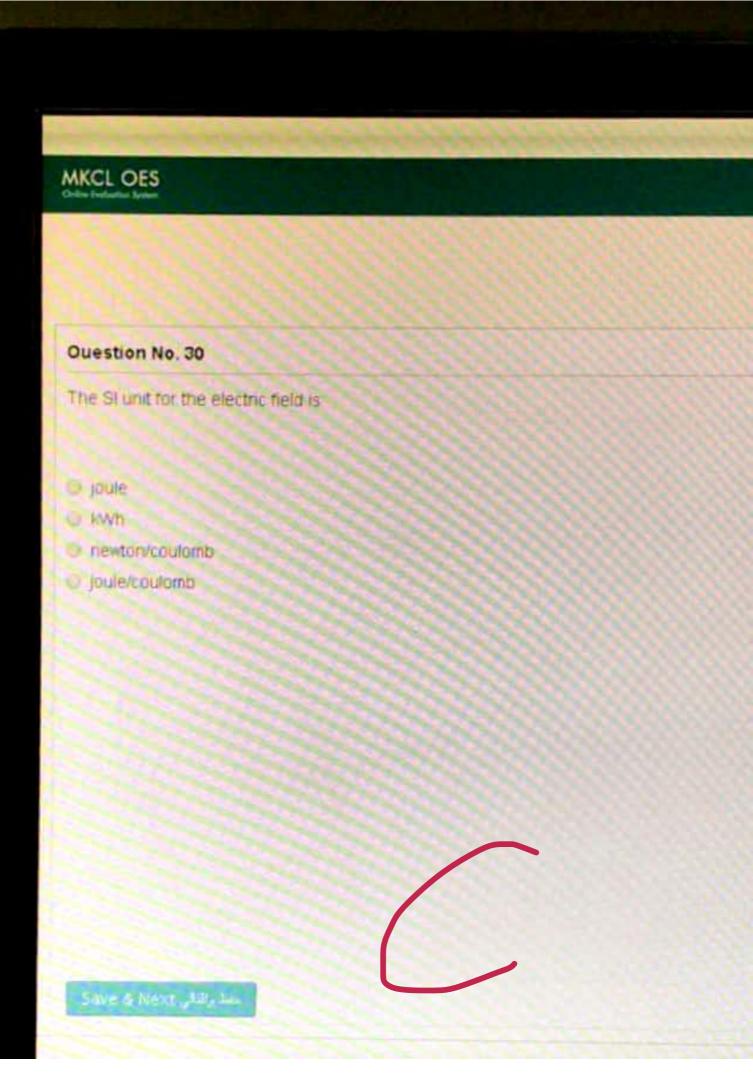
80  $\Omega$ 40  $\Omega$ 20  $\Omega$ 120  $\Omega$ 

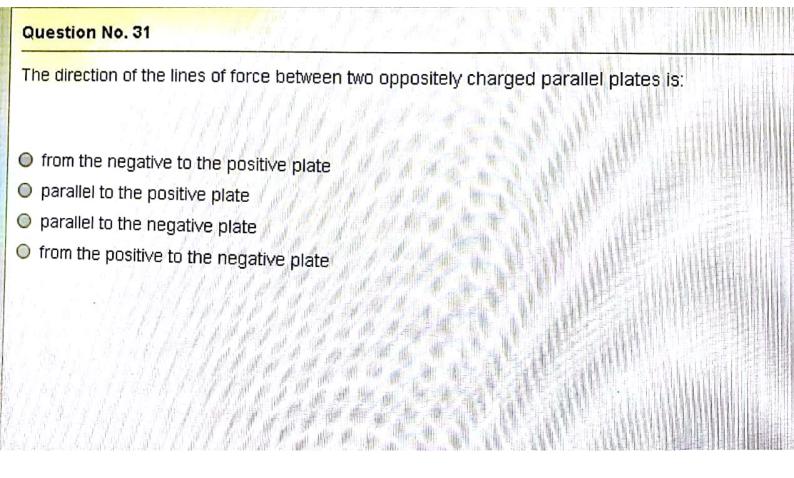


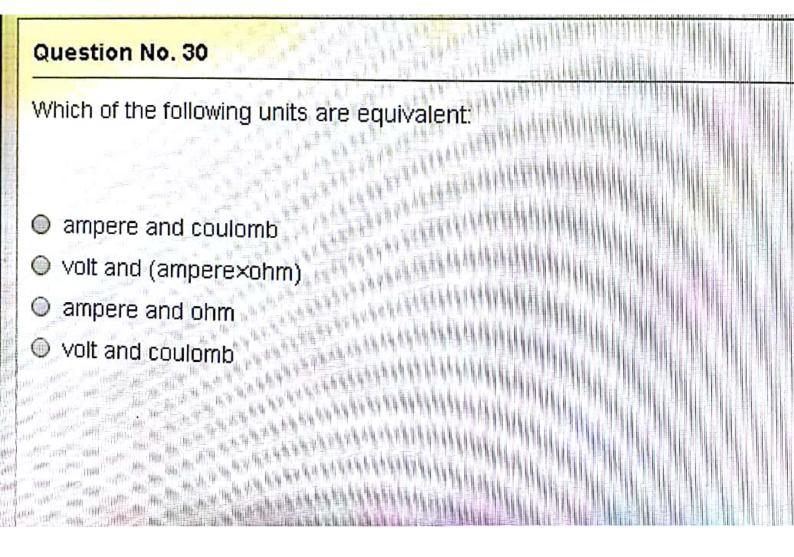
In an electric circuit consisting of two resistances (10  $\Omega$  and 50  $\Omega$ ) connected in series to 12-V battery, the voltage drop across the 10- $\Omega$  resistance is:

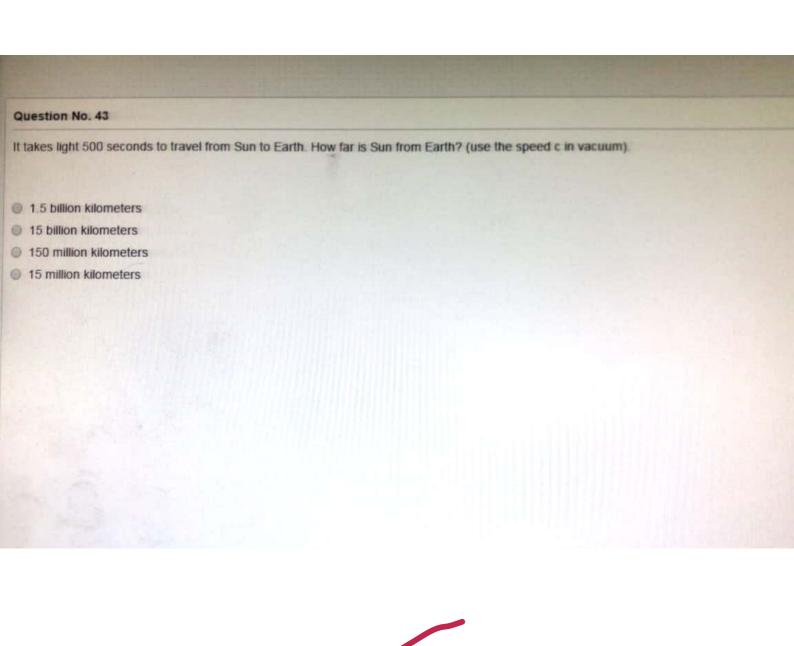
- @ 10 V
- 0 2 V
- @ 12 V
- 0 5 V







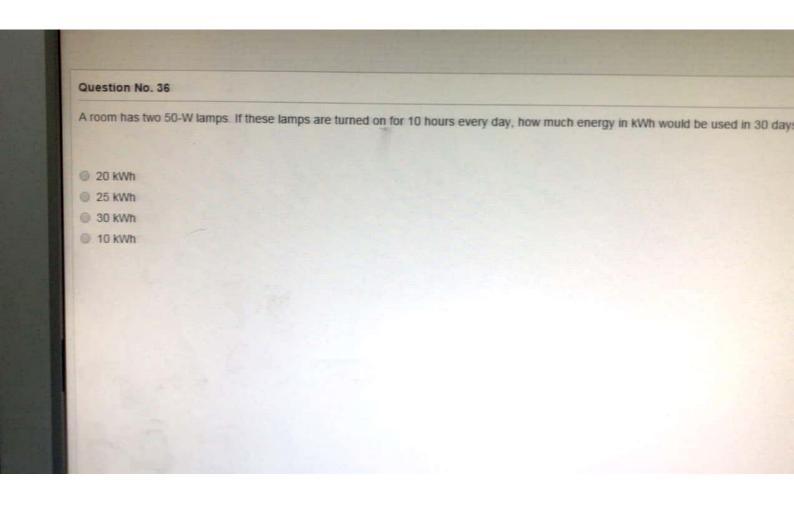




We have 10 resistances that are connected in parallel. If each has a value of 1 k $\Omega$ , their equivalent resistance is:

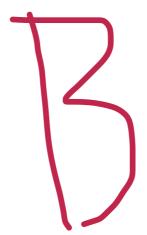
- ⊚ 1000 Ω
- 🥖 1 Ω
- 🔘 100 Ω
- ⊕ 10 Ω





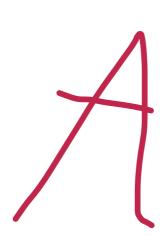
Three identical lamps, each of resistance 4 Q, are connected in series to a 6-V battery. The current passing through each tamp is:

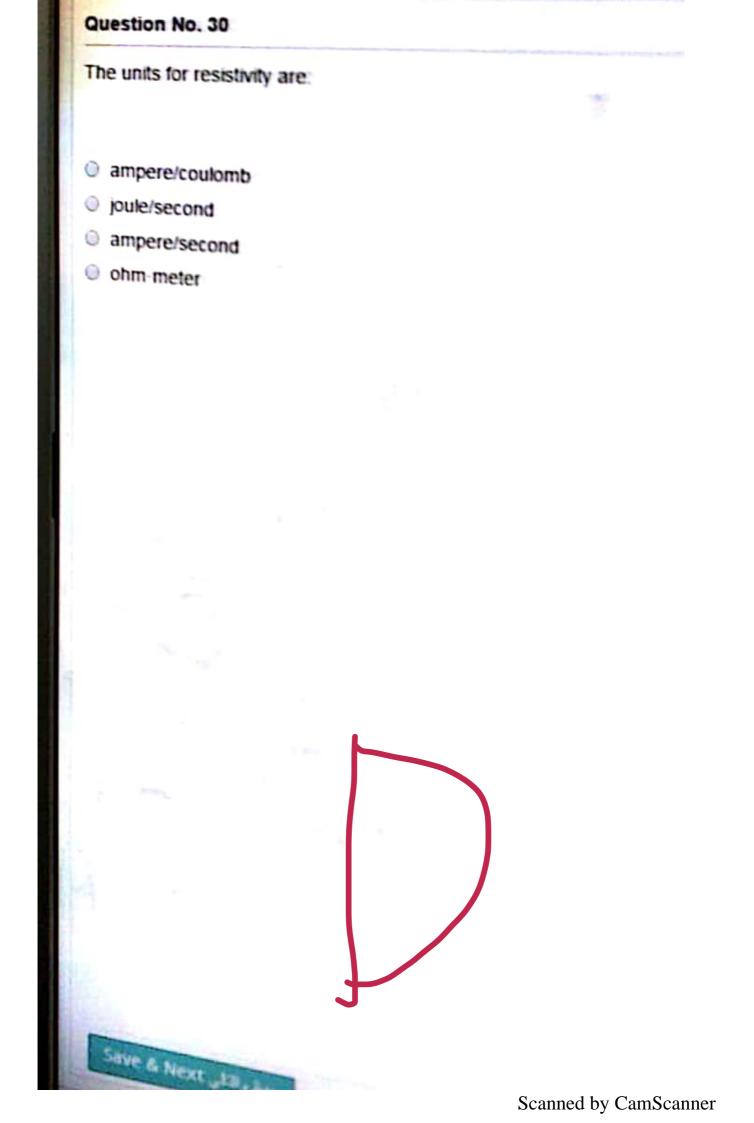
- 9 3 A
- ⁰ ½ A
- 1 A
- 9 3/3 A

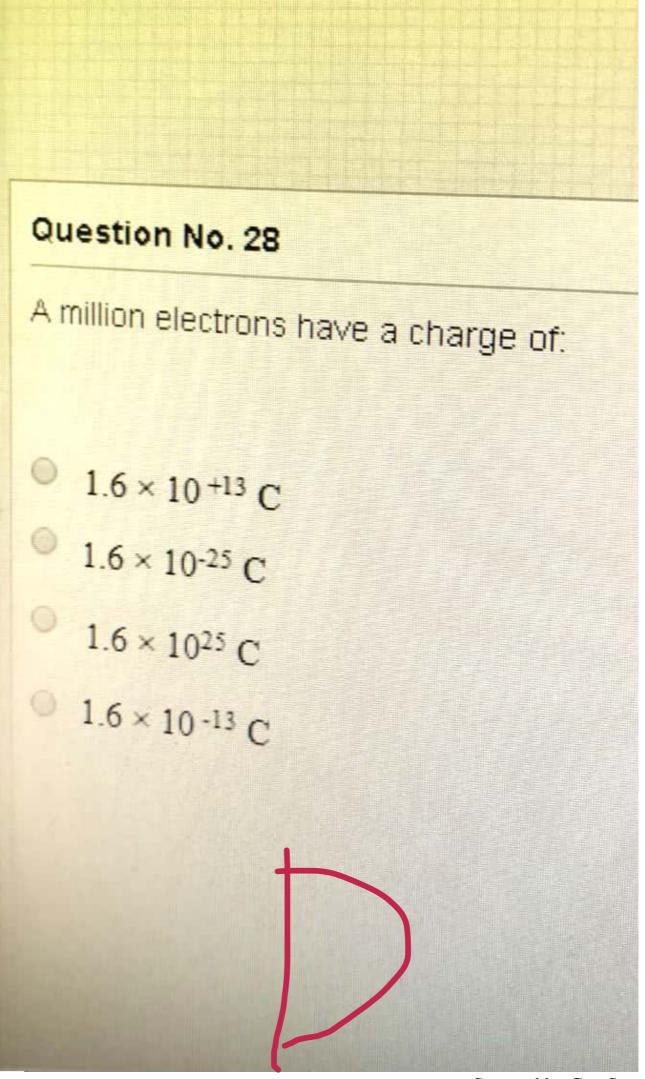


An electric circuit consists of a  $125-\Omega$  resistance connected across the terminals of a 25-V battery. The electric current in this circuit is:

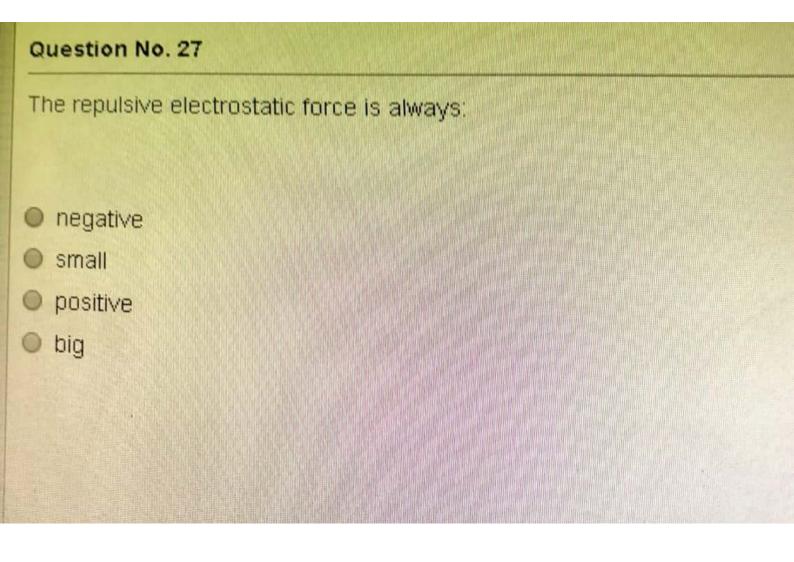
- @ 0.2 A
- 5 A
- ② 2 A
- 0.5 A







Scanned by CamScanner



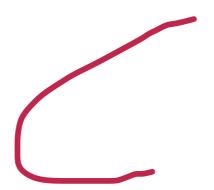
A characteristic of a capacitor is that it:

- can be used as a lamp
- can be made of a single wire
- cannot be charged
- can store electric energy



Coulomb's force between two charges q1 and q2 separated by a distance r is directly proportional to:

- $\circ$  q<sub>1</sub> only
- $\bigcirc$  q<sub>1</sub>q<sub>2</sub>
- q<sub>2</sub> only



A capacitor consists of two:

- conducting wires connected in series
- closely spaced parallel metal plates
- parallel insulating plates
- insulators in series



معطر راتبلي Save & Next

If a capacitor is connected to a battery of potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential difference 6 V, the capacitor becomes fully charged when the potential diff

- @ 12 V
- 6 V
- @ 3 V
- @ 0V

مطراتان Save & Next

In an electric circuit consisting of two resistances (10  $\Omega$  and 50  $\Omega$ ) connected in parallel, if the current through the 10- $\Omega$  resistance is 1 A, the current through the 50- $\Omega$  resistance is:

- 1/4 A
- 1/2 A
- 1/3 A
- 1/5 A

User

Num

37

0

\_

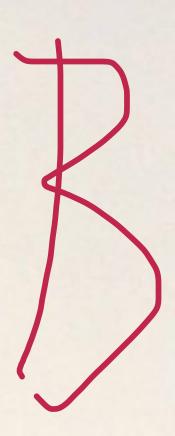
10

22

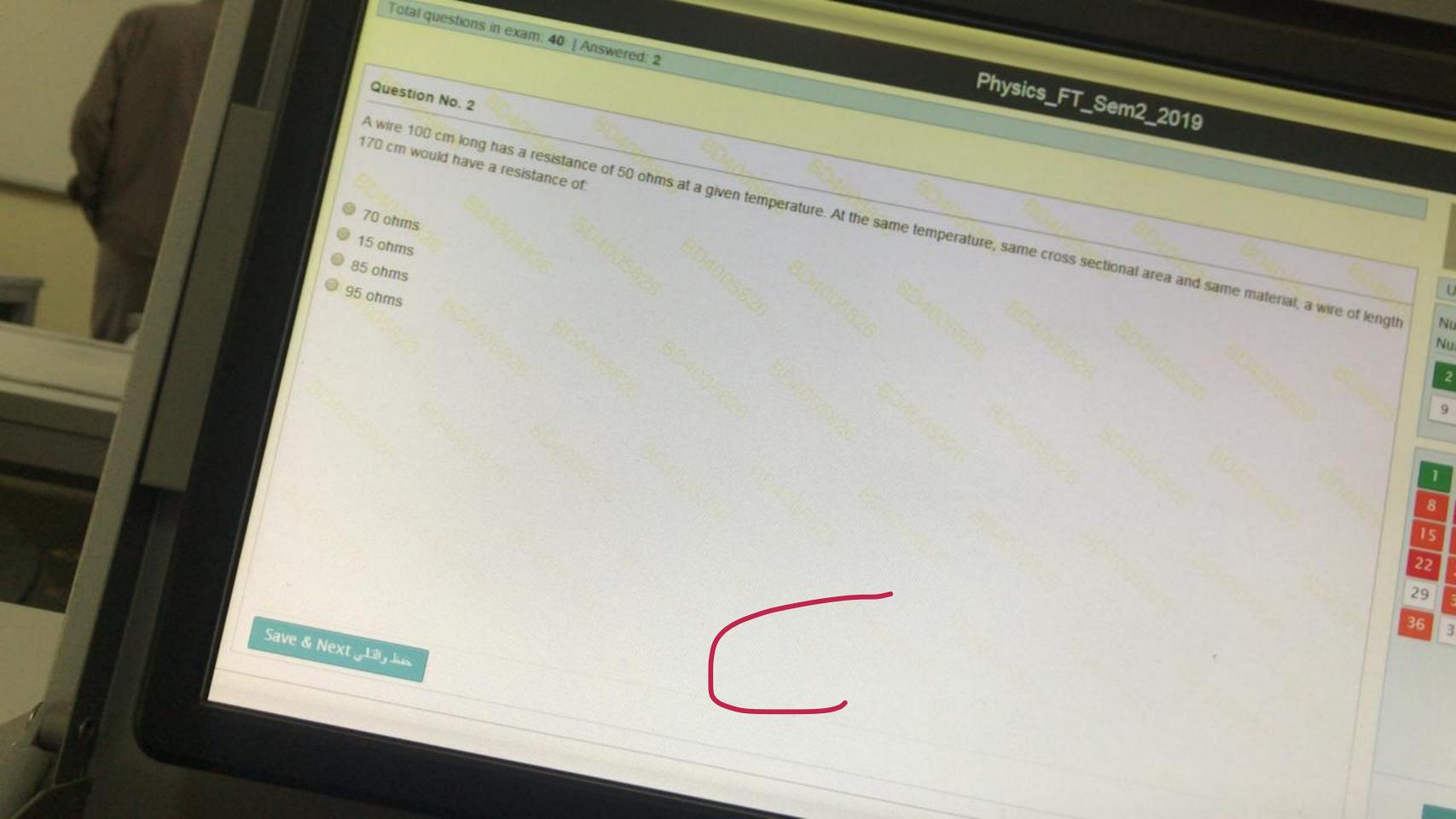
29

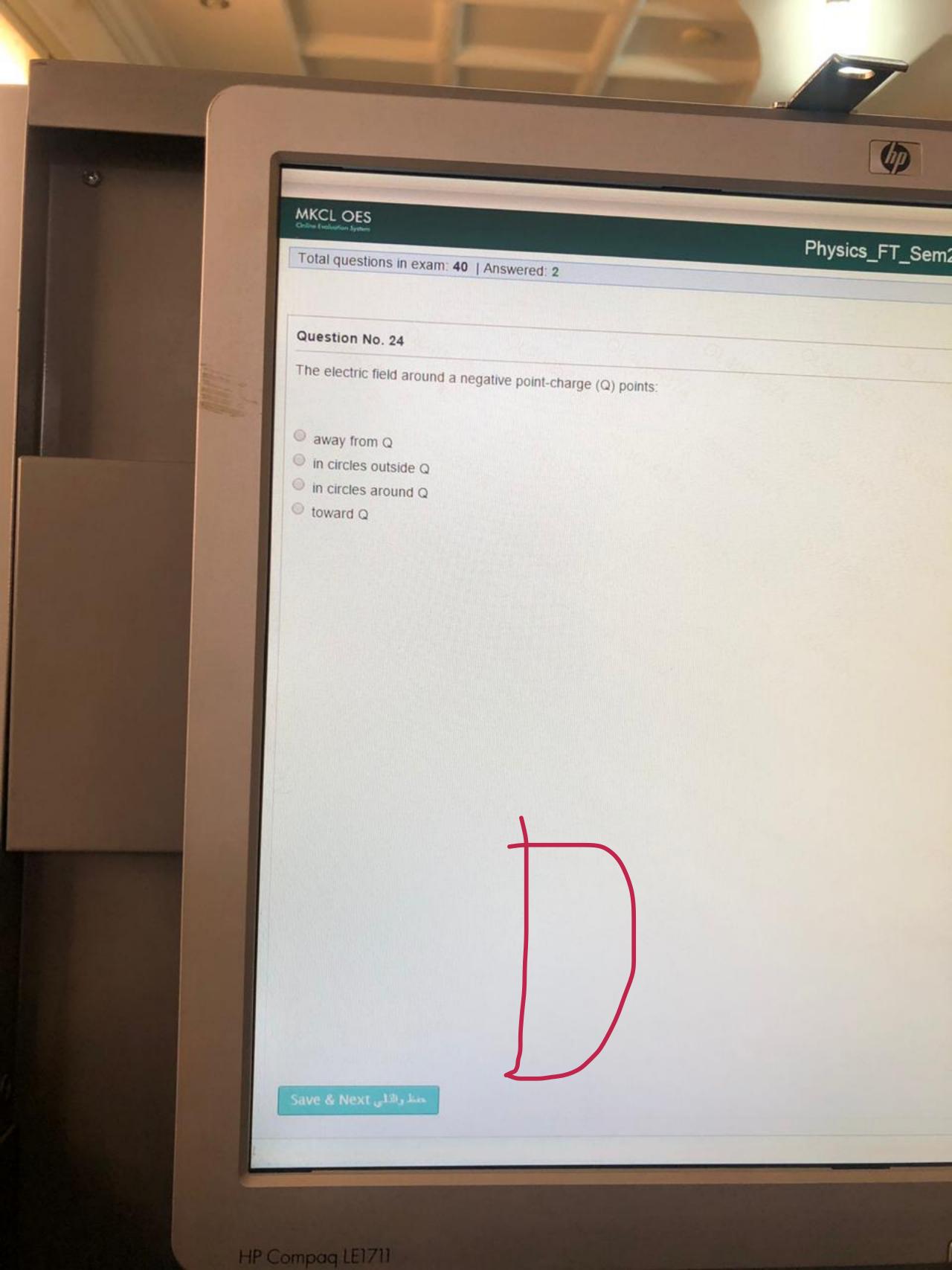
One kilowatt-hour equals (hint: 1W.s = 1J):

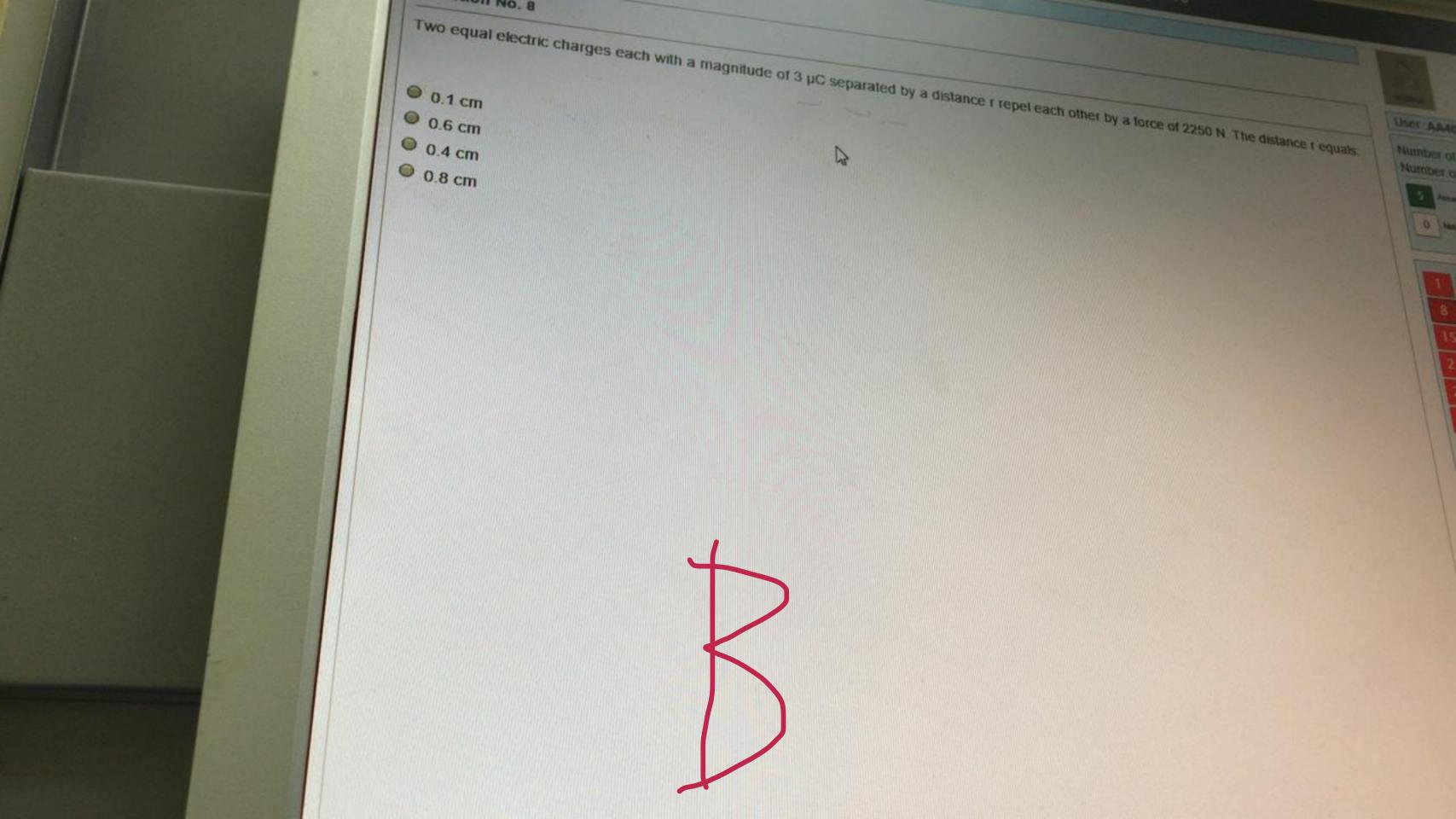
- @ 360 kJ
- @ 3.6 MJ
- @ 3.6 kJ
- 36 kJ



حظراقلی Save & Next







Physics\_FT\_Sem2\_201 OES questions in exam. 40 | Answered. 10 Find the resistance of a copper wire 68 m long with cross-sectional area of 6.8×10<sup>-3</sup> cm<sup>2</sup> at 20 °C. The resistivity of copper is at 20 °C is 1.7×10<sup>-6</sup> O cm guestion No. 18 resistivity of copper is at 20 °C is 1.7×10-6 \O cm. @ 170 Q ○ 0.17 O 0 17 D 0 17 D Save & Next La La Land

Total questions in exam: 40 | Answered: 5

### Question No. 37

Two equal electric charges separated by a distance of 3 cm repel each other by a force of 360 N. The magnitude of each charge is:

- 6 µC
- 4 µC
- 1 μC
- 9 μC



# Total questions in exam: 40 | Answered: 2

#### Question No. 5

The attractive electrostatic force is always:

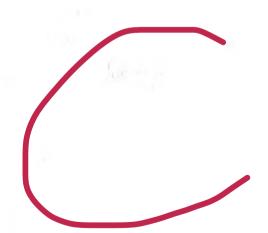
- O big
- positive
- o small
- negative



| A |        |     | ~  |
|---|--------|-----|----|
|   | estion | MO. | 21 |

When a capacitor is connected to a battery; the plate connected to the \_\_\_\_\_\_ terminal becomes \_\_\_\_\_

- negative, positive
- o positive, negative
- opositive, positive
- o positive, neutral



An electromagnetic wave consists of two oscillating

- electrons and neutrons fields
- electric and magnetic fields
- protons and magnetic fields
- electrons and magnetic fields



Adams Tales

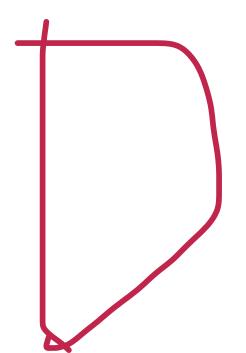
Two equal electric charges separated by a distance of 2 cm repet each other by a force of 90 N. The magnitude of each charge is

- O AUC
- @ 2 µC
- @ 3 µC
- @ 1 µC



Electric power companies normally sell us electric energy in units of:

- O kW/h
- O vott
- O watt
- O kWh



Three identical lamps, each of resistance 9 Ω, are connected in parallel to a 9-V battery. Their equivalent resistance is

- 0 12 Ω
- @ 9Ω
- 6 Ω
- ⊚ 3Ω

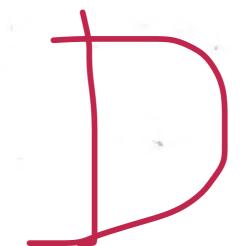
If a tamp in a 110-V electric circuit draws 1.5 amperes, its power rating is:

MH3078630

- 0 165 W
- 110 W
- 220 W
- 75 W

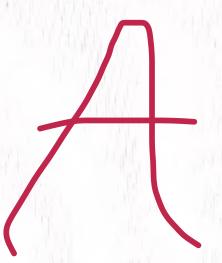
If the power rating of a lamp is 55 W, the current it draws in a 110-V electric circuit is:

- 0 5 A
- 0 2 A
- ◎ 0.25 A
- © 0.5 A →



A charge q = 0.1 C located at point (A) has electric potential energy Ep = 100 J caused by a group of charges (Q). The electric potential resulting from Q at A is:

- O 1000 V
- 0 100 V
- 0 10 V
- 0 1 V



For resistances that are connected in parallel, the equivalent resistance is:

- bigger than the biggest resistance
- O less than the smallest resistance
- equal the smallest resistance
- equal the biggest resistance



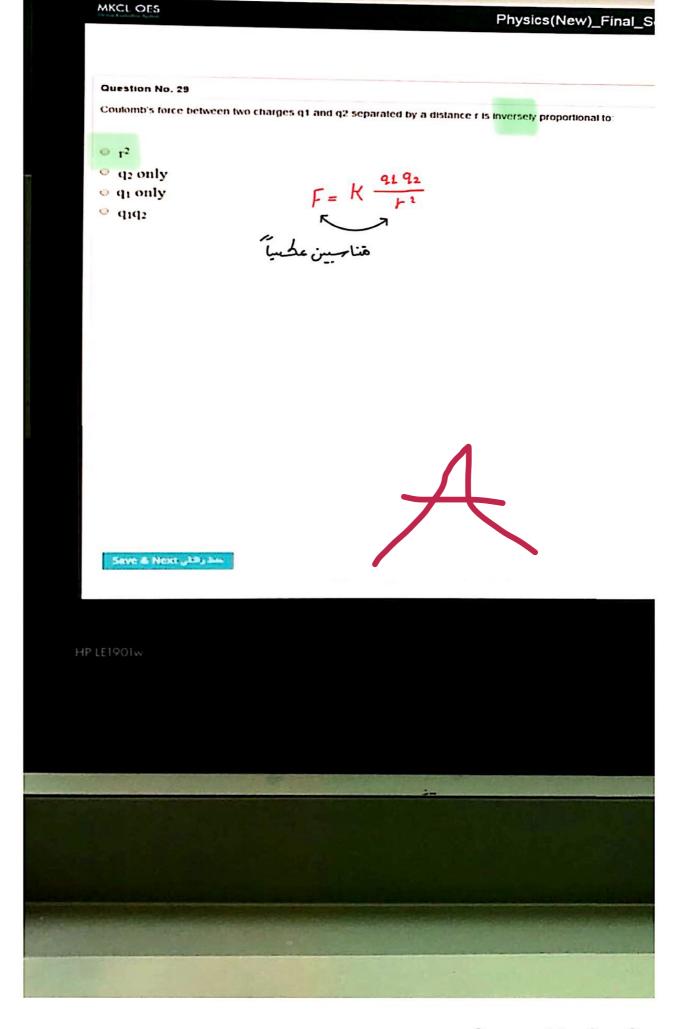
معدواللي Saive & Next

**Scanned by CamScanner** 

**Scanned by CamScanner** 

Scanned by CamScanner

Scanned by CamScanner

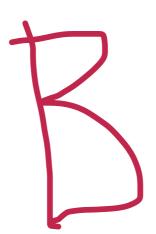


**Scanned by CamScanner** 

**Scanned by CamScanner** 

Three identical lamps, each of resistance 9  $\Omega$ , are connected in parallel to a 9-V battery. Their equivalent resistance is:

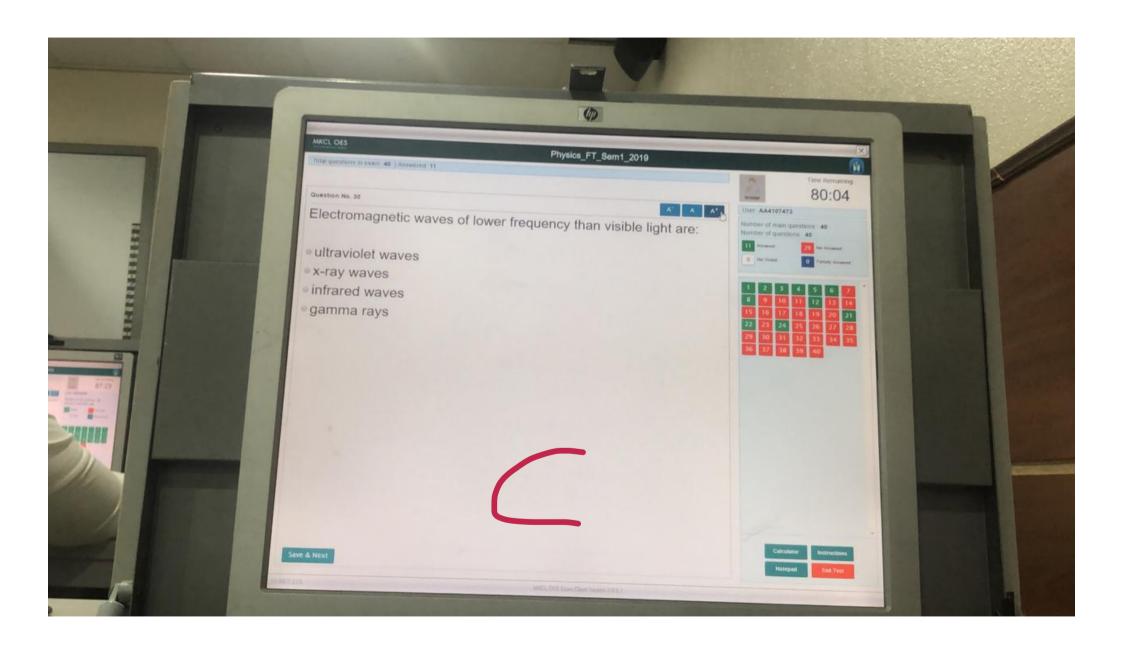
- 0 12 Ω
- 0 3 Ω
- 0 9 Ω
- 0 6 Ω

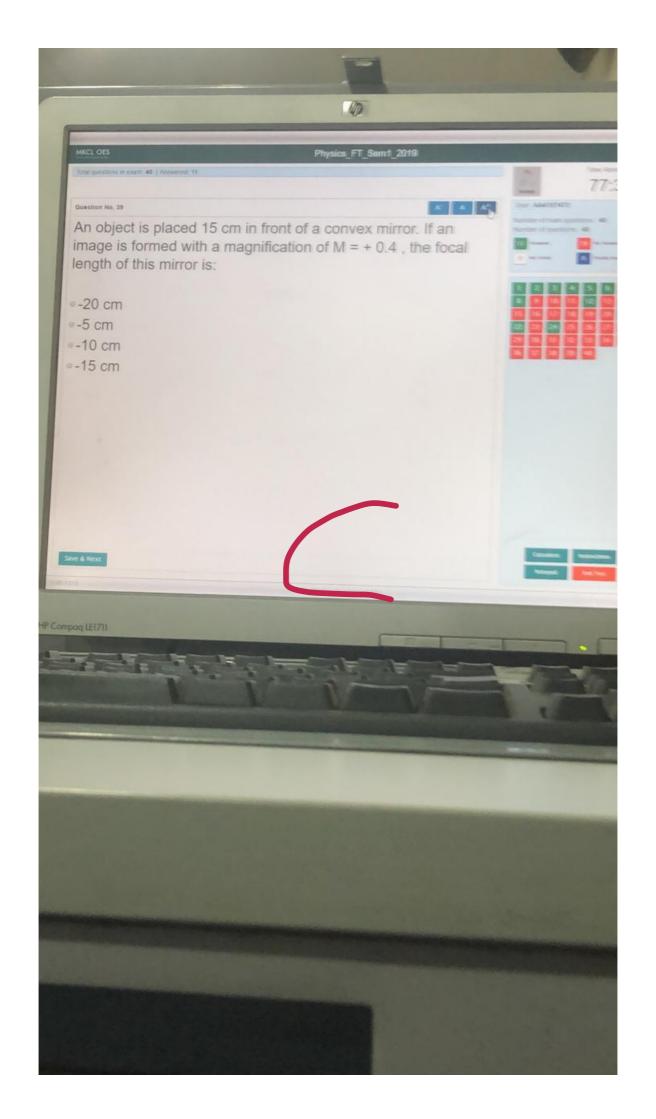


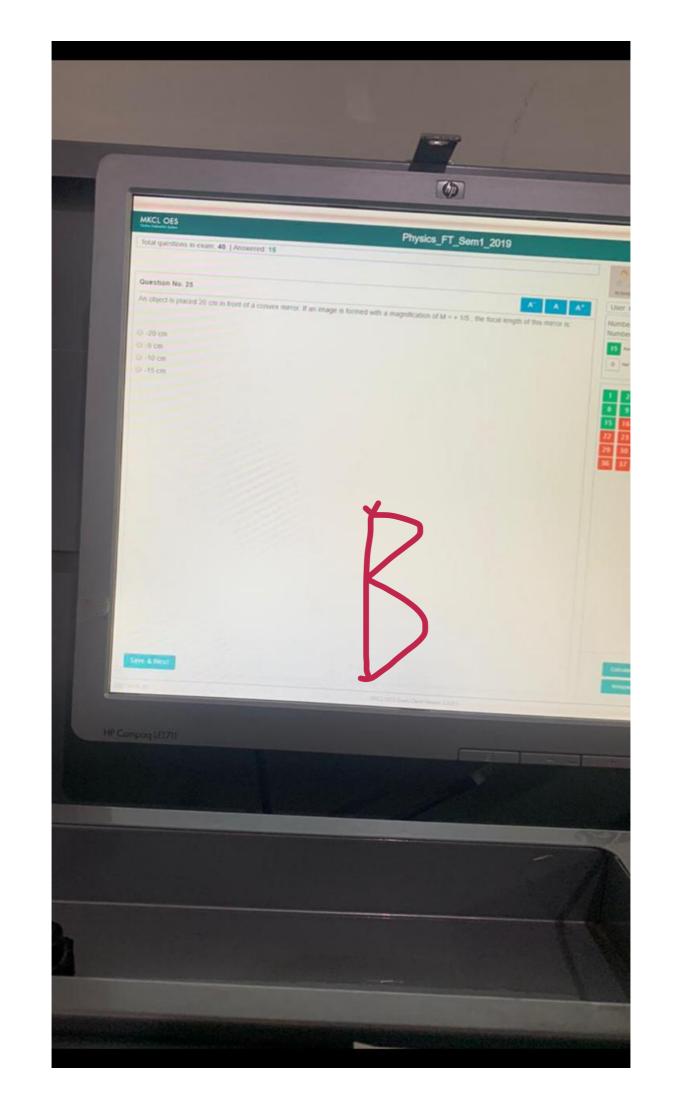
# **Chapter 5**

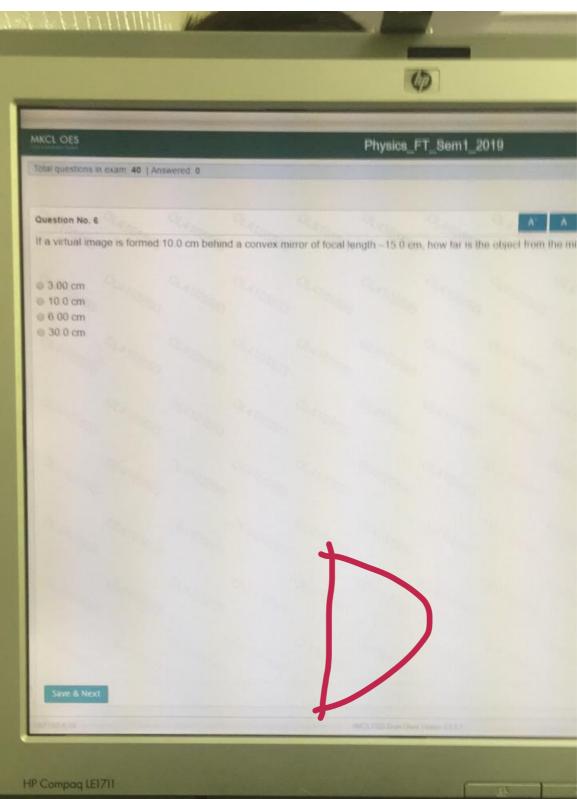
# **52 Question**

لا تتوقف أبدا عن المحاولة لاتتوقف ابدا عن الإيمان، لا تستسلم ابدا ♥.





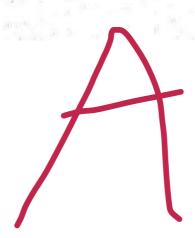




HP Compaq LEI7II

If an object is placed inside the focal point of a concave mirror, its image is:

- virtual and larger
- virtual and smaller
- erect and smaller
- erect and real



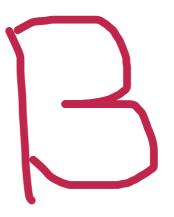
An electromagnetic wave of (600 nm) wavelength has frequency: (use the speed c in vacuum)

1800 Hz

5 × 10<sup>14</sup> Hz

1.3 × 10<sup>14</sup> Hz

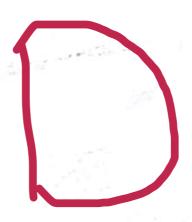
180 Hz



# Question No. 40 If a candle is placed at 10 cm from a concave mirror of 30-cm focal length, its image will be: real and enlarged virtual and smaller real and smaller virtual and enlarged

An image formed by a plane mirror:

- o can be projected on a screen
- is inverted
- is on the same side as the object
- is of the same size as the object



منارفتان Save & Next

Electromagnetic waves of lower frequency than visible light are:

- x-ray waves
- infrared waves
- gamma rays
- ultraviolet waves



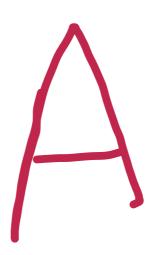
مطراقلي Save & Next

# MKCL OES

#### Question No. 42

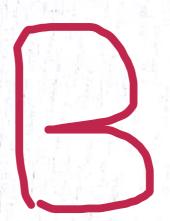
Compared to ultraviolet waves, the wavelength of infrared waves is :

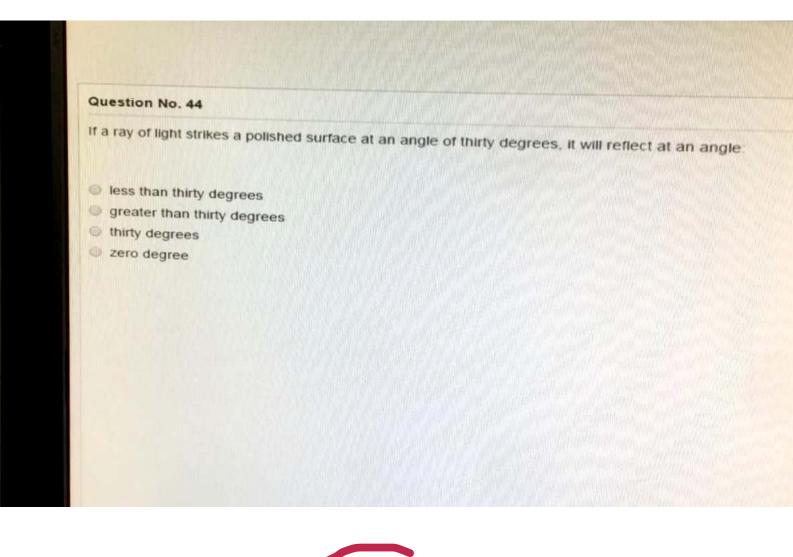
- longer
- the same
- one third
- one half



The magnification of a plane mirror is:

- 0.5
- (6) 1
- 2
- 10





3

When a ray of light is incident perpendicular to a mirror surface, its angle of incidence is:

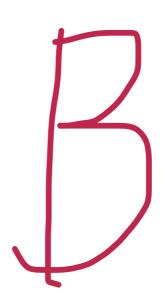
- @ 30°
- 0°
- 90°
- @ 45°



| Q | ue | sti | on | N | 0. | 44 |
|---|----|-----|----|---|----|----|
|   |    |     |    |   |    |    |

The first law of reflection states that the angle of incidence is \_\_\_\_\_\_ the angle of reflection.

- less or equal to
- equal to
- greater than
- less than



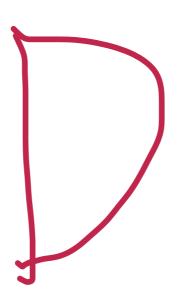
# Compared to radio waves, the velocity of visible light waves in vacuum is: Impossible to know the same less more



# Question No. 44 An image formed by a plane mirror is: virtual and inverted virtual and erect real and inverted real and erect

Which of the following waves has the greatest frequency?

- microwaves
- radiowaves
- infrared light
- ultraviolet



MKCL OES

# Question No. 44

A real image formed by a concave mirror is always:

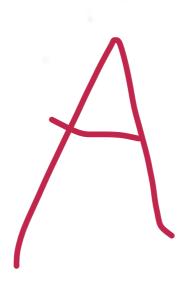
3

- inverted
- smaller
- erect
- enlarged

4

When light reflects from a surface, there is a change in its:

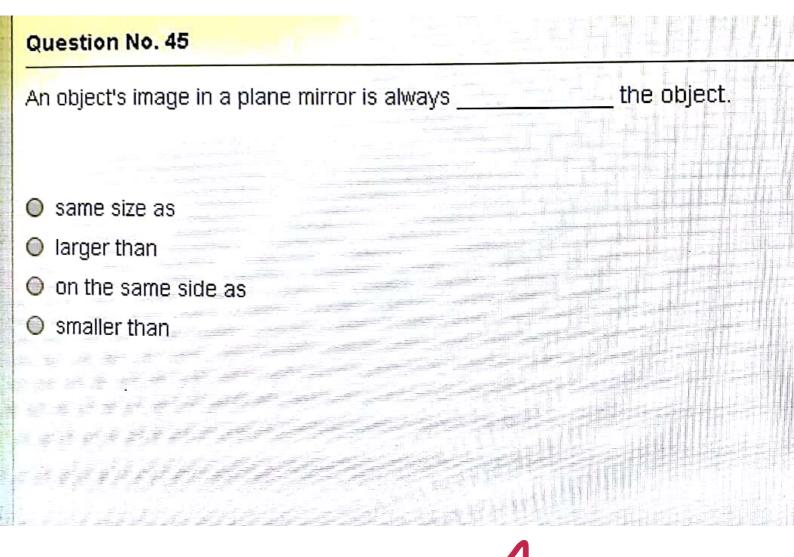
- direction
- frequency
- speed
- wavelength

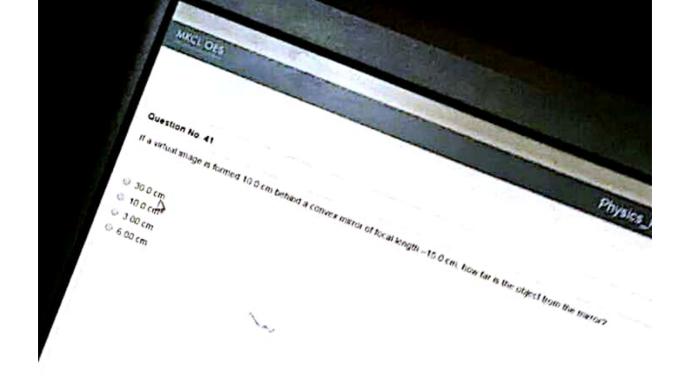


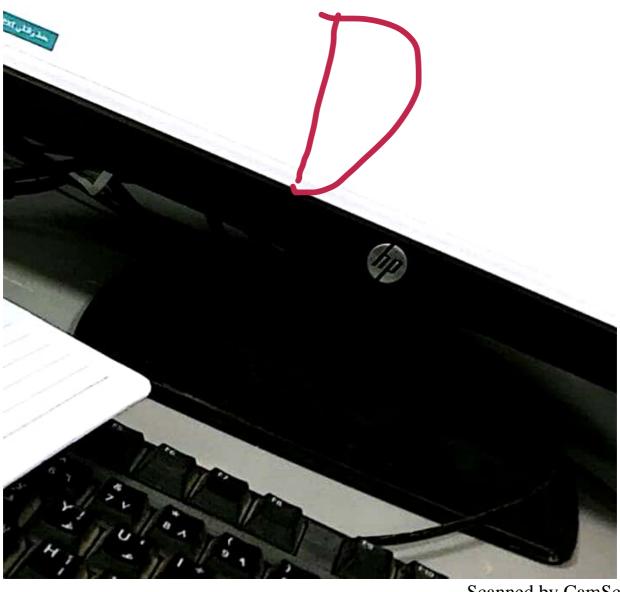
An image of an object formed by a convex mirror is:

- real and larger than the object
- erect and smaller than the object
- real and erect
- inverted and larger than the object





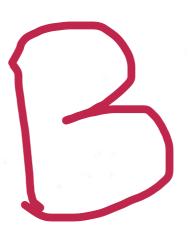




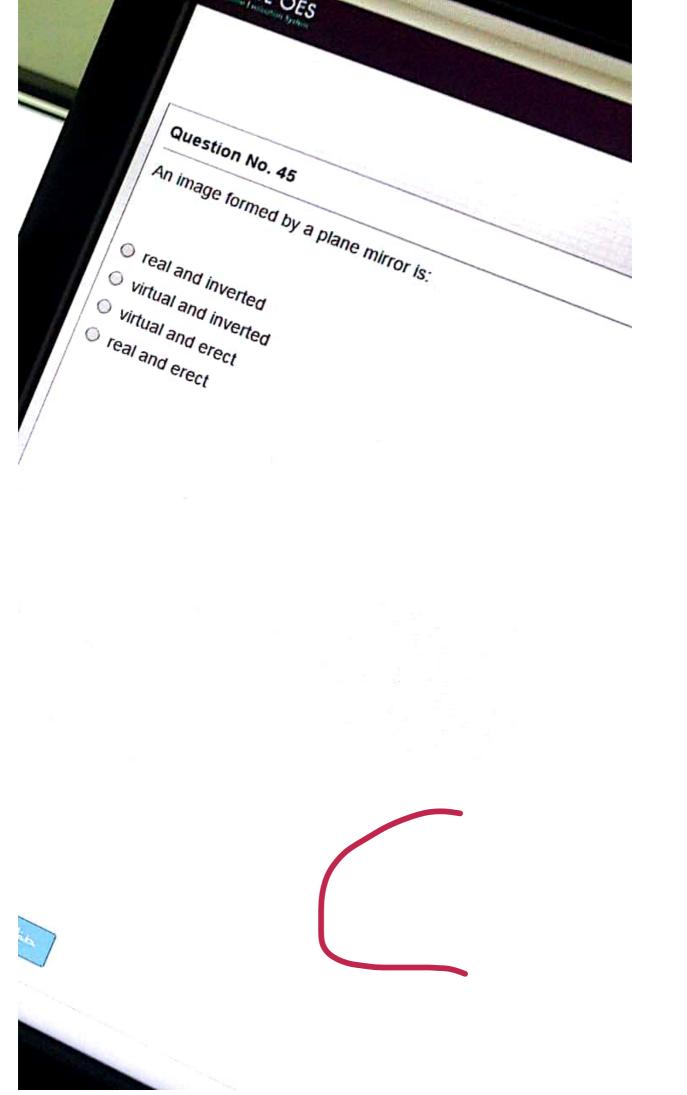
Scanned by CamScanner

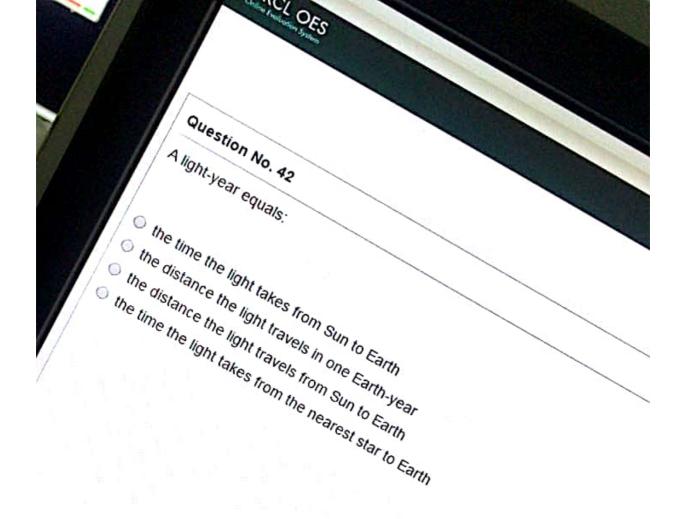
Four types of electromagnetic waves are correctly arranged from long to short wavelength as:

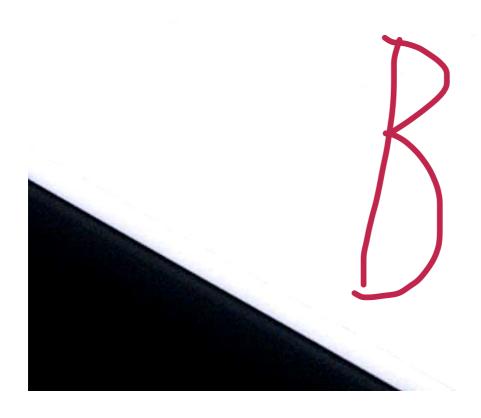
- infrared, X-rays, ultraviolet, visible
- infrared, visible, ultraviolet, X-rays
- O ultraviolet, infrared , visible, X-rays
- O X-ray, infrared, ultraviolet, visible



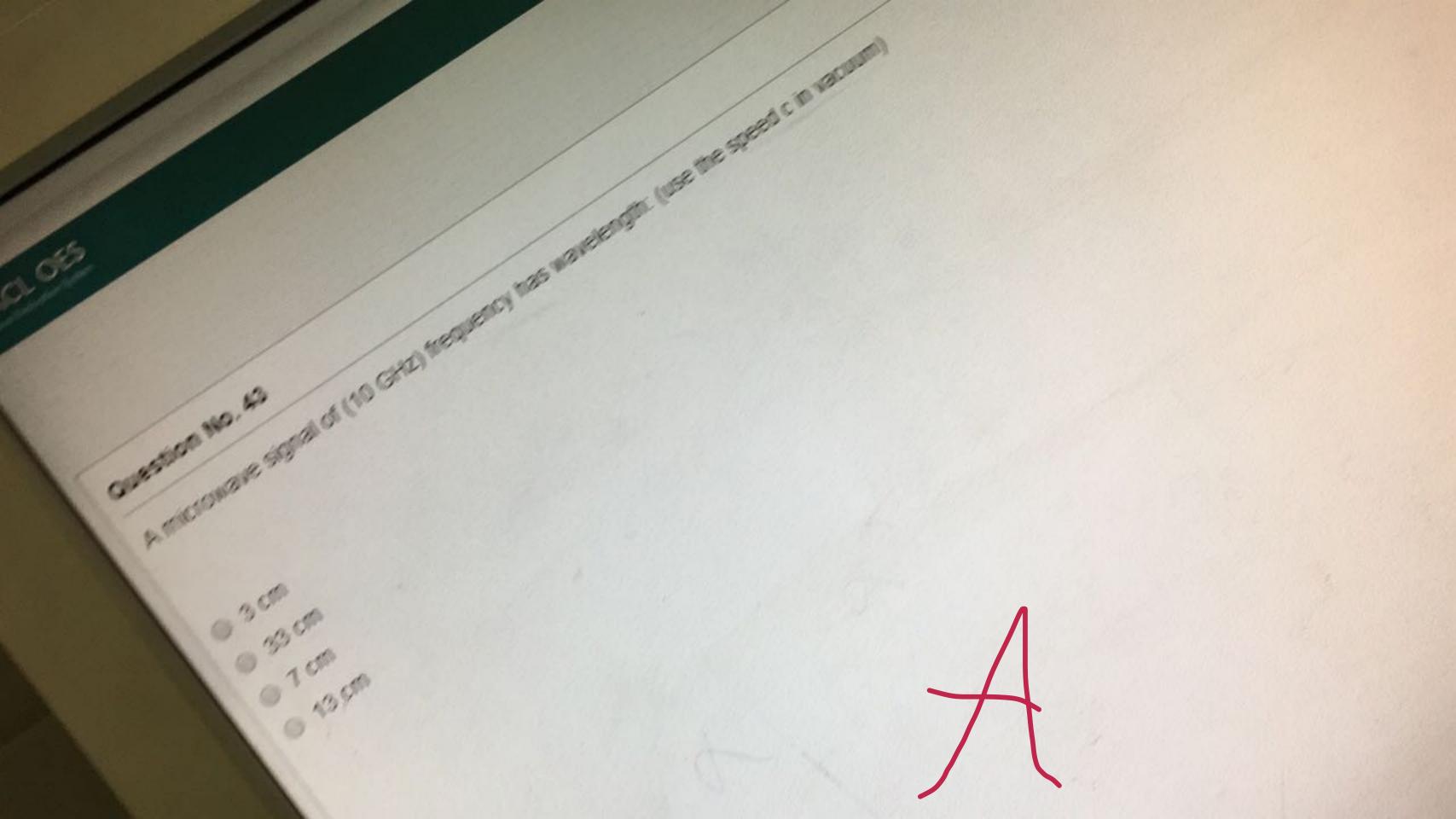
حفظ والثلى Save & Next







Physics\_FT\_Se Question No. 44 Mirrors show clearly how light is: refracted absorbed transmitted reflected HP L1710



A convex mirror has:

- positive focal length
- no focal length
- negative focal length
- zero focal length

Light waves can travel through:

- o concrete
- steel
- glass
- lead

حند راتلی Save & Next

HP Compag LEIZII



# MKCL OES

Total questions in exam: 40 | Answered: 0

Physics\_FT\_Sem2\_2019

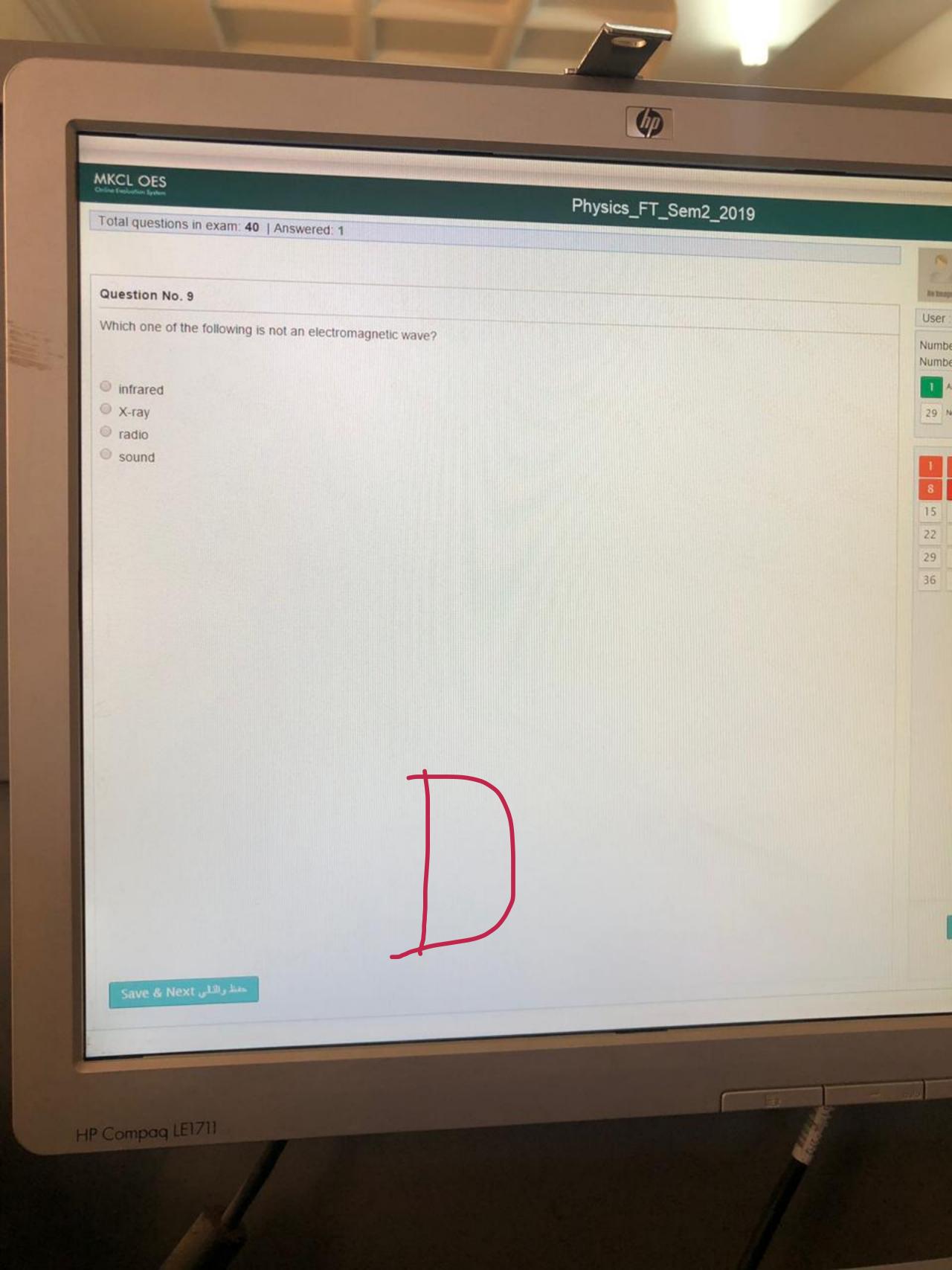
# Question No. 2

The second law of reflection states that the incident ray, the reflected ray, and the normal between them are:

- o perpendicular to each other
- in different planes
- parallel to each other
- in the same plane



مطرشلي Save & Next





# MKCL OES

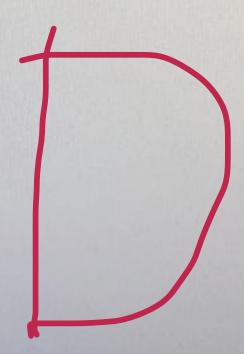
Physics\_FT\_Sem2\_201

Total questions in exam: 40 | Answered: 4

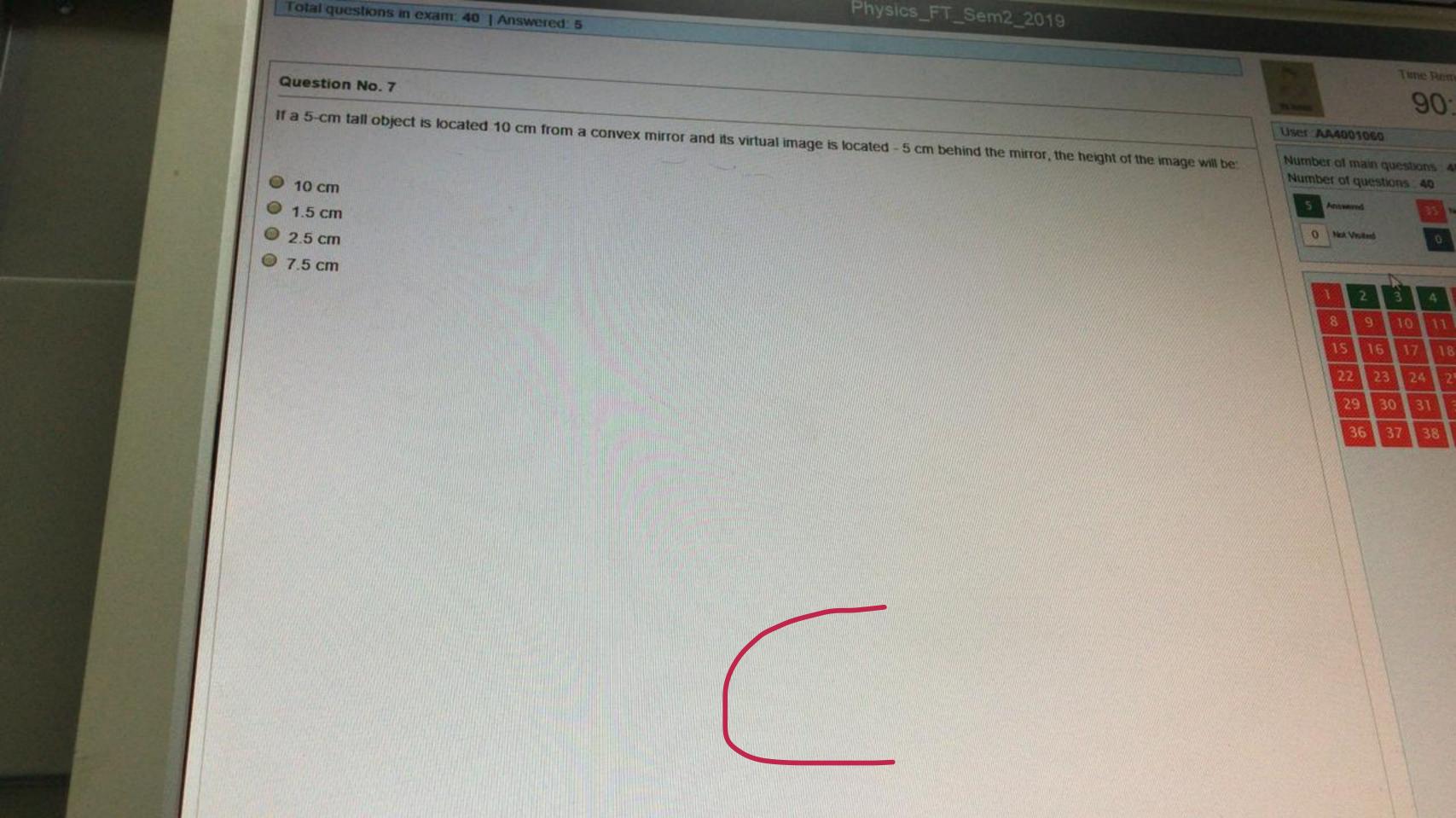
# Question No. 38

If a person stands 0.5 m in front of a plane mirror, the distance between him and his image is:

- 0 0.5 m
- 0 0 m
- 5 m
- 0 1 m



Save & Next منظرالالي



# MKCL OES Total questions in exam 40 | Answered 12 Physics\_FT\_Sem2\_20 Question No. 15 The distance traveled by light in space ( $c = 3 \times 10^8$ m/s) in 6.0 s equals: $0.1.2 \times 10^7 \,\mathrm{m}$ $\odot$ 2.0 × 10<sup>7</sup> m $\odot$ 5.0 × 106 m○ 1.8 × 10° m Save & Next 12, his

The distance between two successive similar points on a wave is its

- intensity
- wavelength
- energy
- trequency

حط راقلي Save & Next

Total questions in exam 40 ( Answered 1

Question No. 1

An electromagnetic wave of (600 nm) wavelength has frequency; (use the speed c in vacuum)

- @ 1800 Hz
- ◎ 180 Hz
- ⊕ 5×10<sup>14</sup>Hz
- ◎ 1.8 × 10<sup>14</sup> Hz

معظ را الى Save & Next

HP Compaq LE1711

| A  | actio | m Ale  | 1 1 2 |
|----|-------|--------|-------|
| Qu | estio | 11 144 | 2. 10 |

A wave's frequency is the \_\_\_\_\_\_

- height of the wave
- time duration for a complete cycle
- time duration for half a cycle
- number of cycles per second



Which of the following waves has the greatest frequency?

- @ infrared light
- @ ultraviolet
- @ radiowaves
- @ microwaves &



1144080069

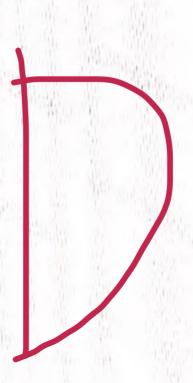
# Total questions in exam: 40 | Answered: 0

#### Question No. 13

An object is placed 30 cm from a convex mirror and its image is formed 15 cm from the mirror. The mirror's focal lengt

ANYSON OF THE PROPERTY.

- O 15 cm
- -10 cm
- ⊙ -20 cm
- - 30 cm

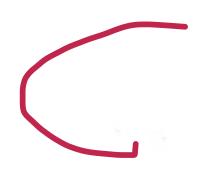


An electromagnetic wave (c =  $3 \times 10^8$  m/s) of (2.75 ×  $10^{-8}$  m) wavelength has frequency:

- 1.1 × 10<sup>16</sup> Hz
- 9.2 × 10<sup>15</sup> Hz
- 1.1 × 10<sup>14</sup> Hz
- 9.2 × 10<sup>16</sup> Hz

Compared to the original object, its image in a plane mirror is:

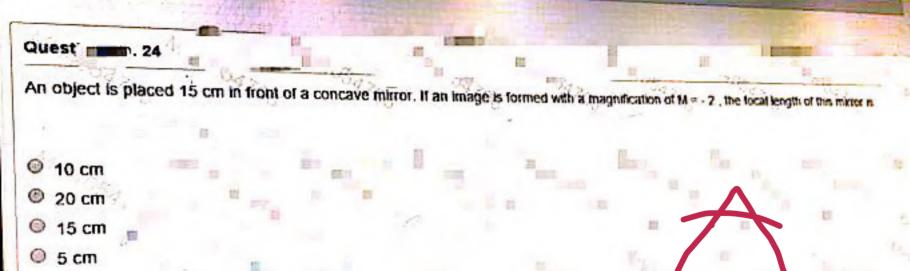
- targer
- inverted
- virtual
- smaller



A concave mirror has

- o negative local length
- positive focal length
- o no focal length
- zero focal length





An object is placed 15 cm in front of a convex mirror. If an image is formed with a magnification of M = + 1/3, the focal length of this mirror is:

O - 7.5 cm

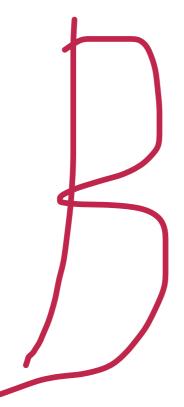
0 - 15 cm

O - 4.5 cm

O - 10 cm

If a 5-cm tall object is located 10 cm from a convex mirror and its virtual image is located - 5 cm behind the mirror, the height of the image will be

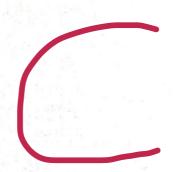
- © 1.5 cm
- © 25 cm
- O 10 cm
- ◎ 7.5 cm



Light that reflects off a convex mirror always:

المحمد المحادث

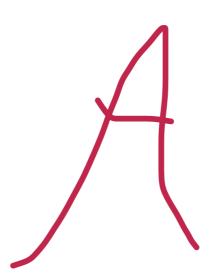
- converges
- scatters in all directions
- diverges
- meets at the focus



#### Question No. 38

In the same medium, radio waves and light waves have the same:

- speed
- wavelength
- frequency
- O color



عطرافل Save & Next

Scanned by CamScanner

#### Question No. 31

Light that reflects off a concave mirror always:



- scatters in all directions
- meets at the focus
- diverges
- converges



مطرطلی Save & Next

Scanned by CamScanner

# Question No. 40 Compared to the original object, its image in a plane mirror is: inverted larger smaller virtual حظ والثلي Save & Next

Scanned by CamScanner

#### Question No. 38

time

If Moon is 384000 km from Earth, how long does it take light to travel from Moon to Earth? (use the speed c in vacuum)

- O 5.2 s
- 13 s
- O 2.7 s
- 0 1.3 s

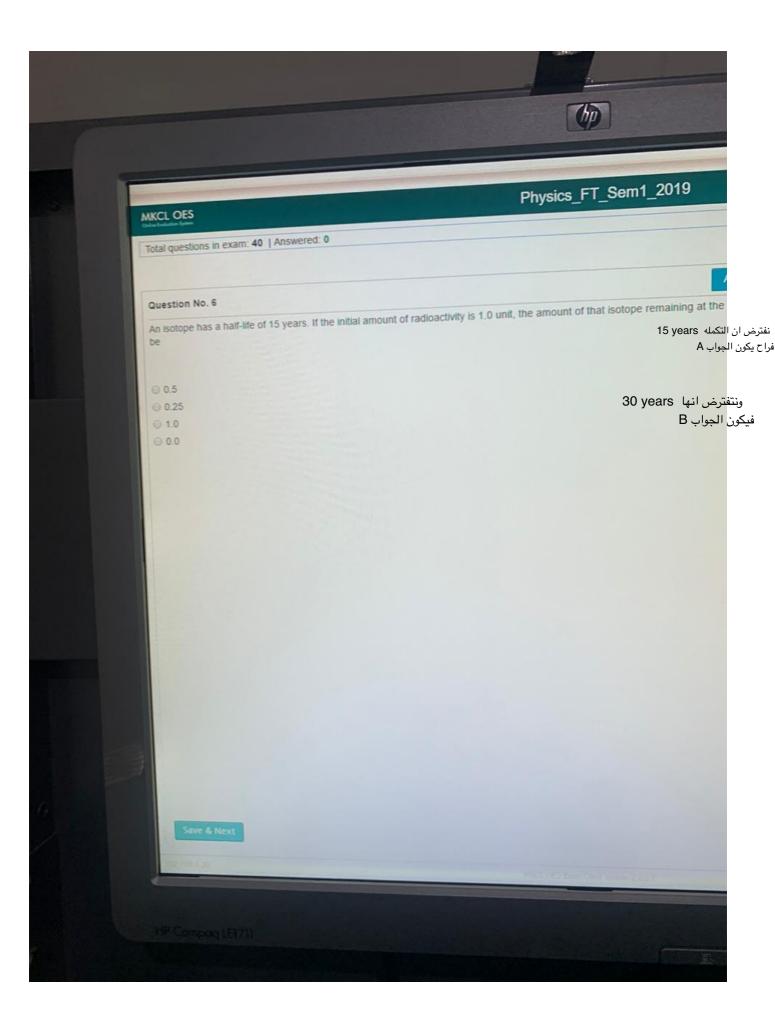
$$=\frac{384000000}{384000000} = 1.28 s$$
 الزمن

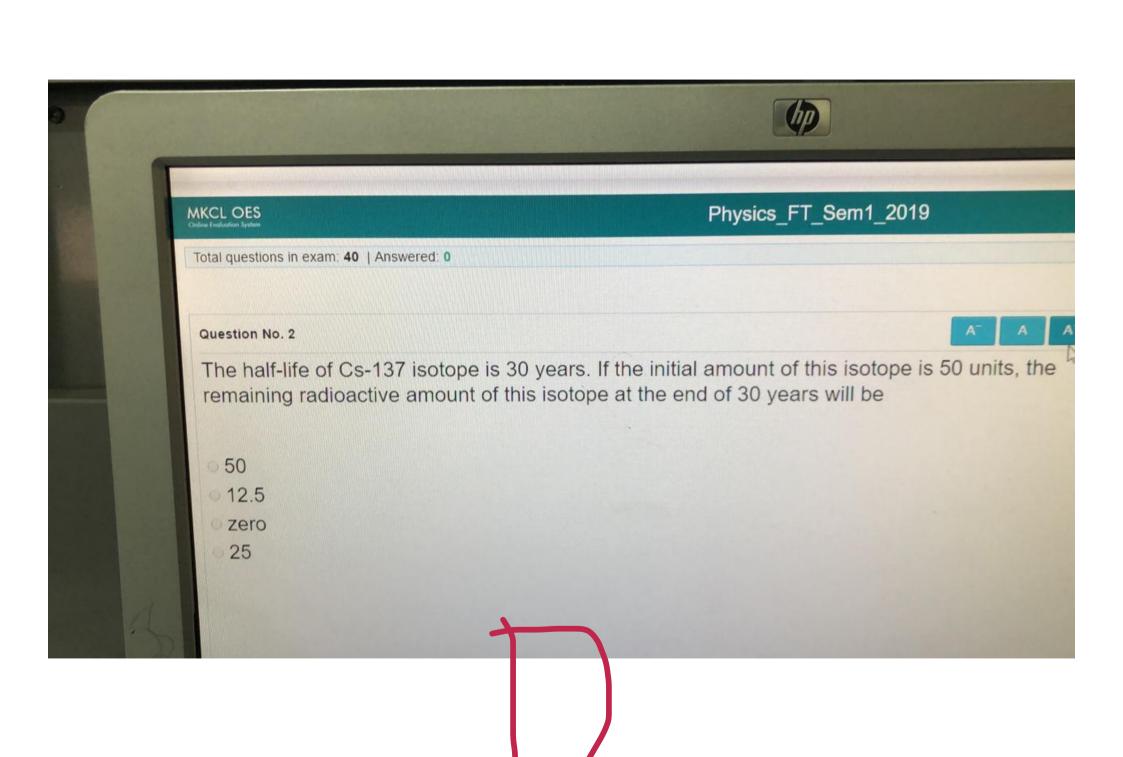


# **Chapter 6**

#### 18 Question

سَيِمضِي القلق، وستَأتي الرَّاحة بعد هذا الكَم مِنِ العناء، سيعوضُ الله توترِ المشَاعر، وإضطراب الأمل، وخوف المستقبل بكل ماهو جمِيل ﴿ ﴿ ...





#### MKCL OES

Phys

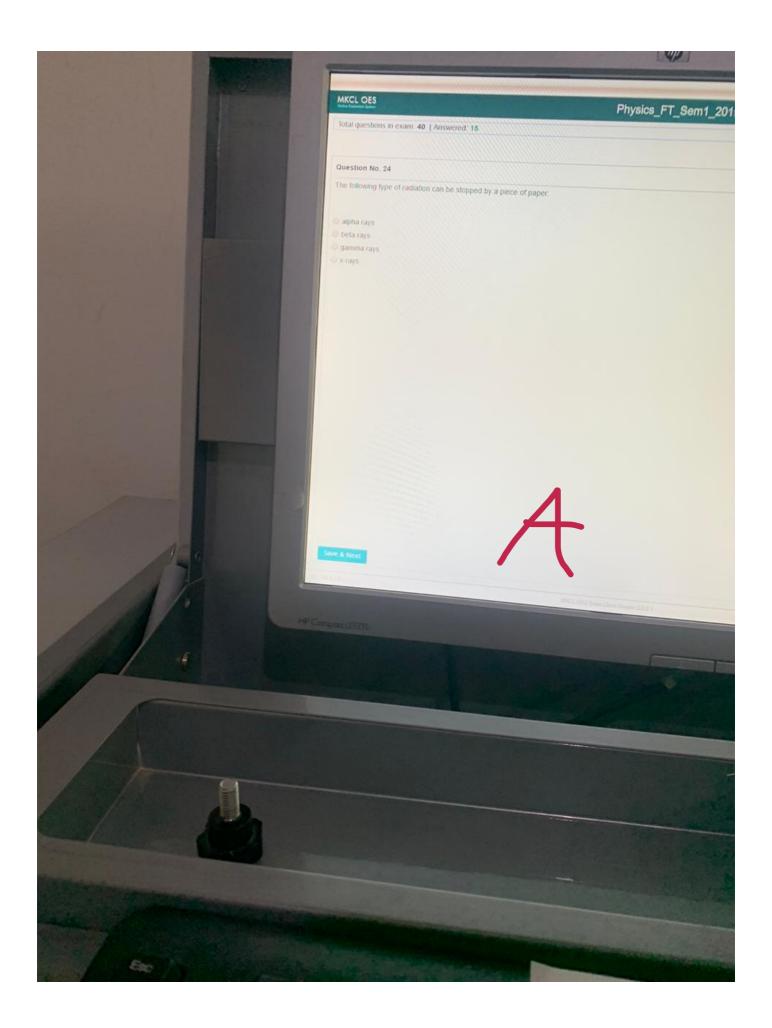
Total questions in exam: 40 | Answered: 0

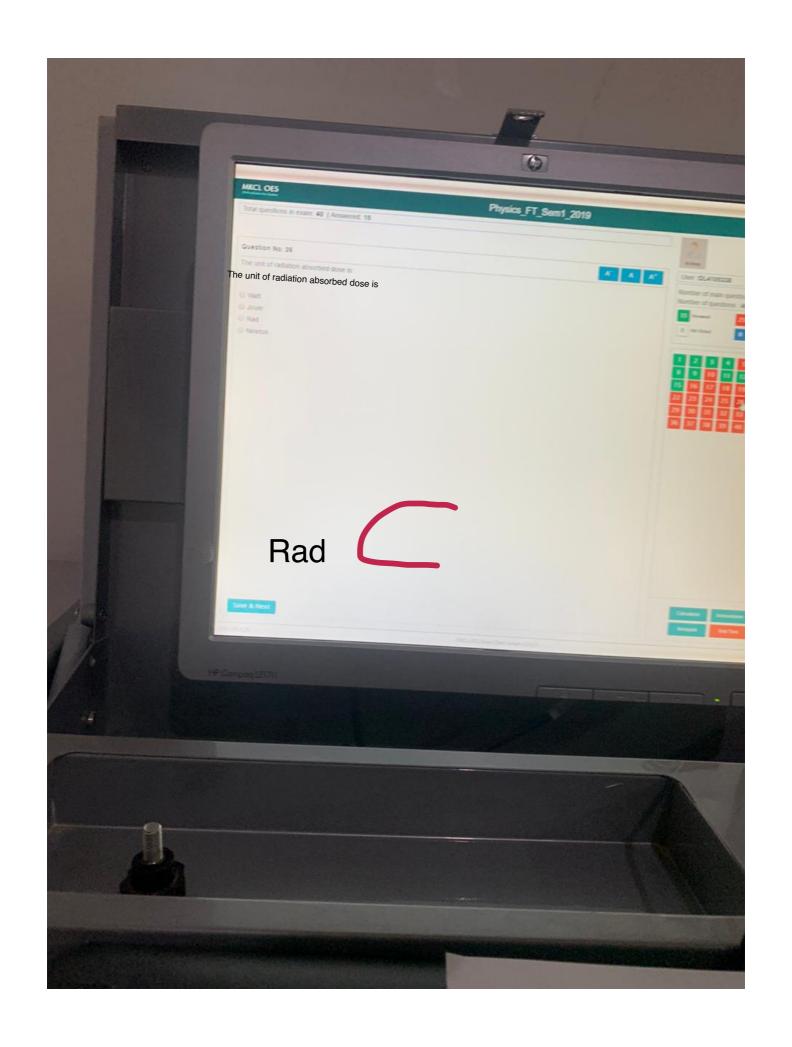
Question No. 1

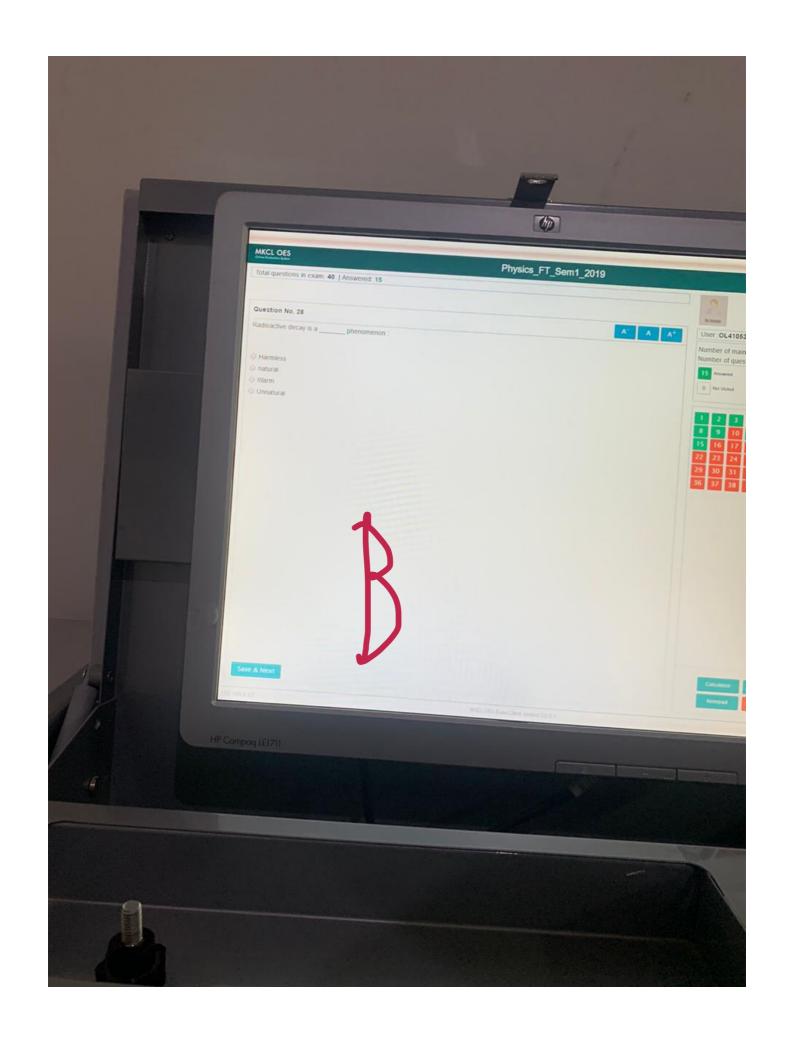
Of these, The most harmful radiation to people is:

- 2 rad alpha + 1 rad beta
- 2 rad alpha + 2 rad beta
- 1 rad alpha + 10 rad beta
- 3 rad alpha + 5 beta

Save & Next







Question No. 33

An isotope has a half-life of 30 months. If the initial amount is 100 units, to remaining at the end of 30 month will be

1 50

12 13

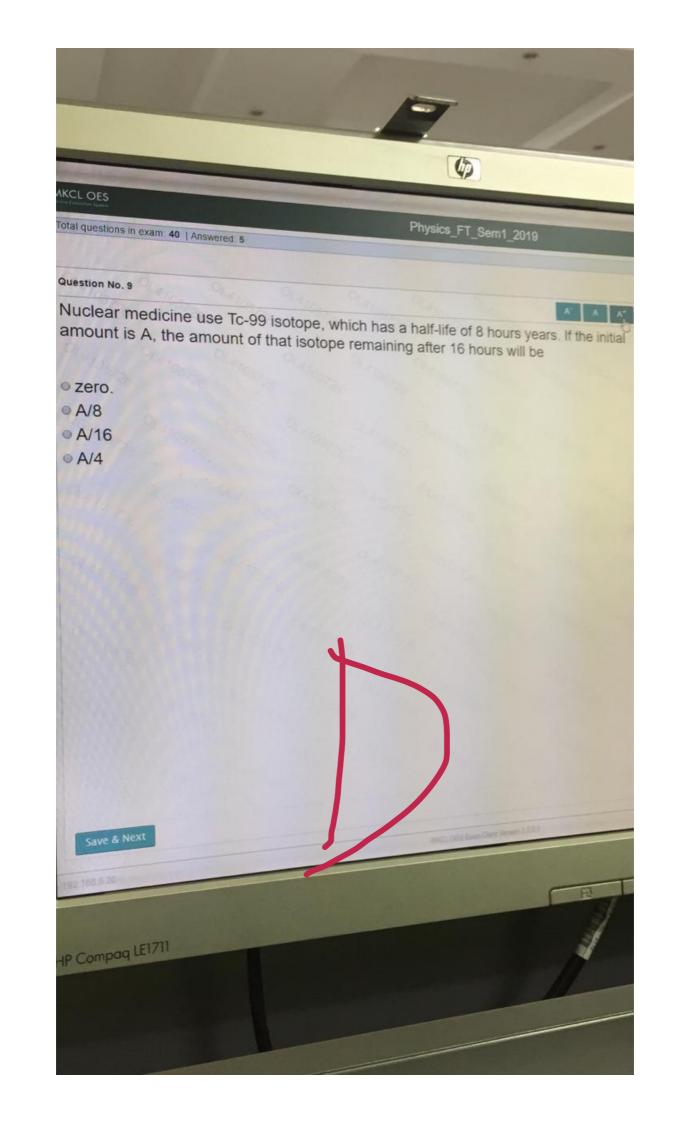
\* ZETO

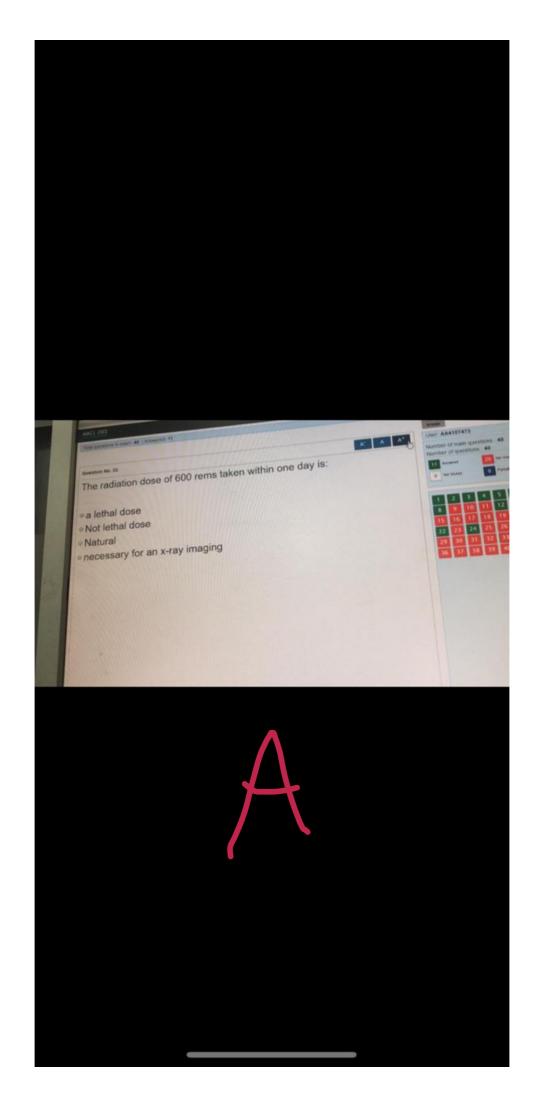
25

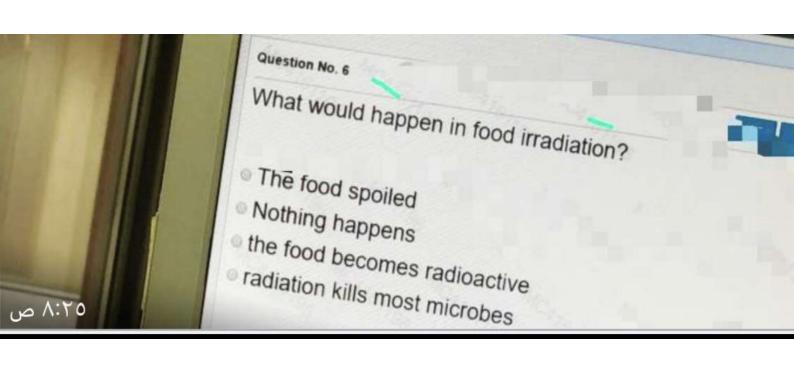


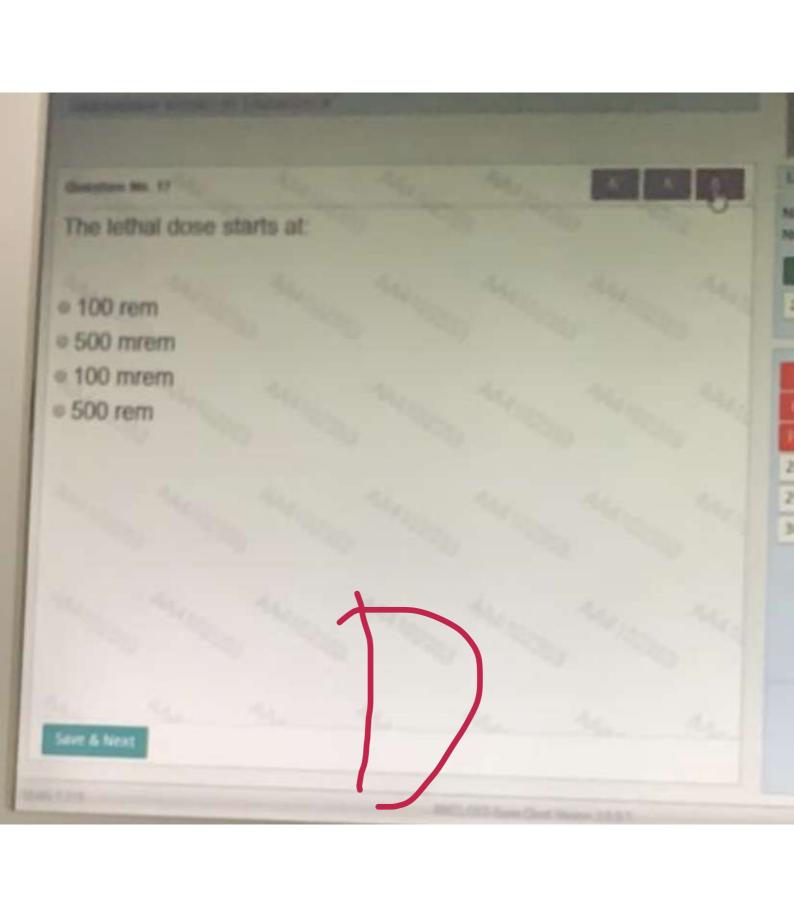


# Total questions in exam 40 | Answered 0 Question No. 16 The rad is the unit of O Power Energy radiation absorbed dose Wavelength Save & Next HP Compaq LE1711







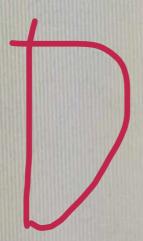


Total questions in exam: 40 | Answered: 6

Question No. 11

"X-rays are deflected by a magnetic field." This statement is:

- o true
- Sometimes true
- Unknown
- o false



رسالة محوّلة 🖊

About 25% environment?

Neutral

Food and eat

Non neutral

ص 43:10



Total questions in exam: 40 | Answered 1

Of these, the least harmful radiation to people is:

- 4 rad alpha + 10 rad beta
- 5 rad alpha + 5 rad beta
- 3 rad alpha + 3 rad beta
- 2 rad alpha + 2 rad beta

Save & Next

MIKES, OES Exen Clock Ven

## **Chapter 6**

**Assessment** 

#### 23 Question

لا يُؤخّر الله أمراً إلا لِخَير ولا يحرمك أمراً إلا لخير، ولا يُنزِّل عليك بلاء إلّا لخير فلا تحزّنَ، رُب الخير لا يَأتي إلا بخير 💝 🐝.

Who is given credit for the discovery of X-ray?

- A. Henri Becquerel
- B. Wilhelm Roentgen
- C. Marie Curie
- D. Pierre Curie

**Answer: B** 

How does radioactivity cause ions to be made?

- A. It adds protons to atoms
- B. It adds electrons to atoms
- C. It add neutrons to atoms
- D. It knocks electrons from atoms

**Answer: D** 

### جاء نفسه في الاختبار 🔽

#### Half-life is

- A. Half the time for radioactivity to double
- B. Twice the time a radioactive particle lives
- C. The time taken for half the radioactive nuclei to decay
- D. Half the time for radioactivity to finish

Which of the following do not deflect when pass through a magnetic fields?

- A. alpha particles
- B. beta particles
- C. gamma rays
- D. Magnetic and electric fields deflect alpha particles, beta particles, and gamma rays.

#### تخترق

Which of these is the most penetrating in common materials?

A.alpha particles

B.beta particles

C.gamma rays

D.all are equally penetrating

#### Most of the radiation in Earth's biosphere

A.is the result of military activities.

B. originates from nuclear power plants.

C. occurs as natural background radiation.

D.is in the form of cosmic rays.

#### Gamma radiation

- A. is high-energy charge particle
- B. is low-energy charge particle
- C. is high-energy photons
- D. can be stopped with a sheet of paper

#### In food irradiation

- A.the food becomes radioactive
- B. the food quality can be improved
- C.no change can be observed in food
- D.electrons and gamma rays cannot be used

**Answer: B** 

Most of the natural radiation dose we get annually is from:

- A Radon-222
- B Potassium-40
- C Carbon-14
- D Uranium-235

**Answer: A** 

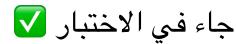
## X-rays produce an image of the bones inside our body by:

- A. scattering from soft tissues and penetrating bones
- B. penetrating soft tissues and getting absorbed by bones
- C. scattering from soft tissues and getting absorbed by bones
- D. penetrating both soft tissues and bones

**Answer: B** 

### The nucleus of a stable atom:

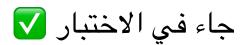
- A. changes frequently
- B. decays in a few years
- C. does not change
- D. emits radiation



Radioactive decay results in the following types of radiation:

- A. alpha, beta, gamma
- B. gamma, beta, x-ray
- C. alpha, gamma, x-ray
- D. alpha, beta, x-ray

**Answer: A** 



Radioactivity is a \_\_\_\_\_ phenomenon:

- A. natural
- B. new
- C. Man-made
- D. false

**Answer: A** 

Of the radioactive radiations, those affected by a magnetic field are:

- A. alpha and gamma, but not beta
- B. alpha and beta, but not gamma
- C. beta and gamma, but not alpha
- D. alpha, beta and gamma

**Answer: B** 

Of the radioactive radiations, those with an electric charge are:

- A. alpha and gamma, but not beta
- B. beta and gamma, but not alpha
- C. alpha and beta, but not gamma
- D. alpha, beta and gamma

Of the radioactive radiations, those that consist of helium nuclei are:

- A. alpha and beta
- B. only gamma
- C. only beta
- D. only alpha

**Answer: D** 

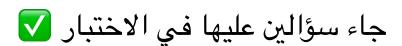
# Radon arises from deposits of:

- A. sodium
- B. uranium
- C. calcium
- D. potassium

**Answer: B** 

### The unit "rad" stands for:

- A. radiation absorbed dose
- B. roentgen equivalent man
- C. radio frequency monitor
- D. real atomic mass



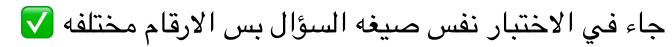
# The unit "rad" equals:

- A. 0.01 J of scattered energy/ 1 kg of tissue
- B. 0.01 J of released energy/ 1 g of tissue
- C. 0.01 J of absorbed energy/ 1 kg of tissue
- D. 0.01 J of absorbed energy/ 1 g of tissue

## The unit of radiation dosage based on potential damage is:

- A. alpha
- B. beta or alpha
- C. ram or rom
- D. rem or Sievert

**Answer: D** 



Of the following, the most harmful radiation to people is:

- A. 5 rad alpha + 10 rad beta
- B. 5 rad alpha + 5 rad beta
- C. 5 rad alpha + 20 rad beta
- D. 10 rad alpha + 5 rad beta

**Answer: D** 

### Radiation is harmful to us because:

- A. it increases our heart rate
- B. it makes us too hot
- C. it damages some of our cells
- D. it burns our skin



# This picture is the international symbol of:

| А | Laser                   |
|---|-------------------------|
| В | Chemicals               |
| С | Ionizing Radiation      |
| D | None-Ionizing Radiation |