

# تجميعات الفيزياء (الميد الثاني)

2020\_1441

Great hopes require a great  
efforts. 😊

محلولة

لا تنسوني من دعائكم

اختكم: عفاف الجهني

Question No. 2

When we heat a block of iron, the iron atoms:

- vibrates more
- decrease in number
- increase in number
- stop moving

A

Save & Next

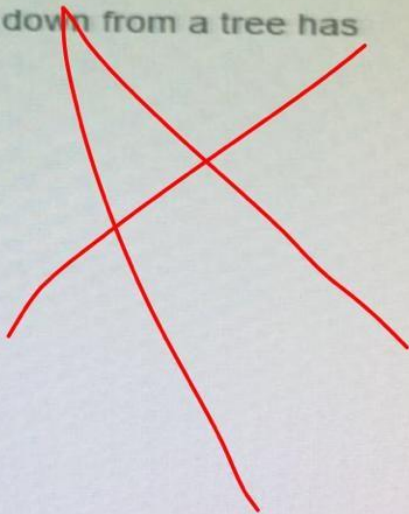
10/05/2019

**Question No. 14**

Before reaching the ground, an apple falling down from a tree has

- both potential and kinetic energy
- no energy
- potential energy only
- kinetic energy only

A



Question No. 13

A

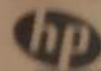
A substance should absorb heat to change from

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

B

Save & Next

HP Compaq LE1711





54 of 57

Physics\_Q

Total questions in exam: 25 | Answered: 0

## Question No. 25

At what speed does a 20-N weight have a kinetic energy of 100 J?

- 40 m/s
- 20 m/s
- 10 m/s
- 30 m/s

$$F = 20$$

$$KE = 100$$

$$v = ?$$

$$m = \frac{20}{10} = 2$$



$$100 = \frac{1}{2} (2) (x)^2$$

$$= 10$$

Question No. 11

According to Newton's second law ( $F=ma$ ), if  $F$  is kept constant, then:

- $m$  is inversely proportional to the acceleration  $a$
- $m$  is directly proportional to the acceleration  $a$
- $F = a/m$
- $a = m$

A

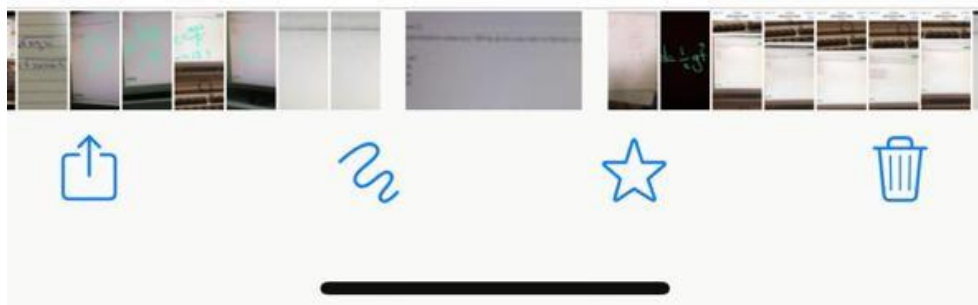
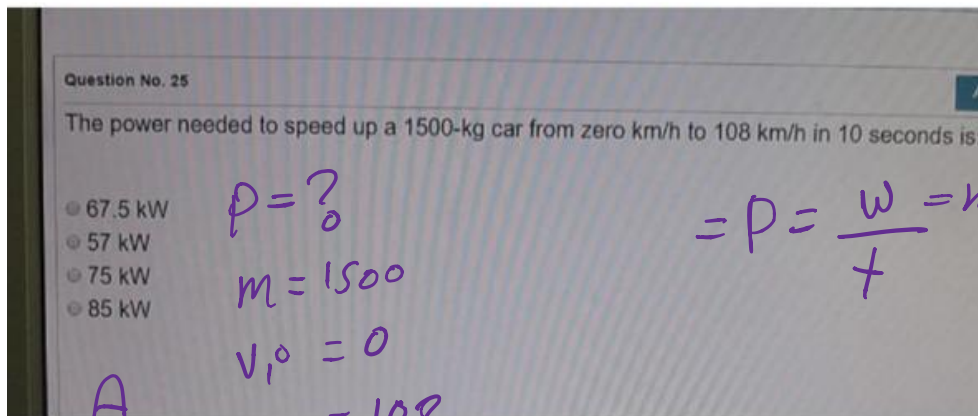
2:34

LTE



+966 50 043 4525  
19/11/2019, 10:33 AM

All Media



If a man pushes a 100-kg box with a 90-N force on a level floor and the box does not move, the force of friction between the box and the floor is:

- 90 N
- 0 N
- 100 N
- 50 N

A



## Question No. 7

The coefficient of friction is always.

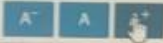
- unless quantify
- less than 1
- negative
- more than 1

A

Save & Next

Total questions in exam: 25 | Answered: 3

Question No. 24



As an object is freely falling, the speed by which it hits the ground is:

- zero
- smaller than the initial speed.
- maximum speed during the motion.
- same as the initial speed.

C

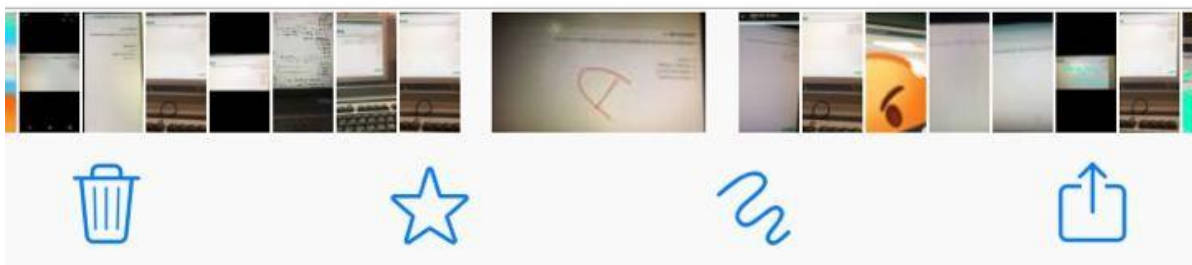
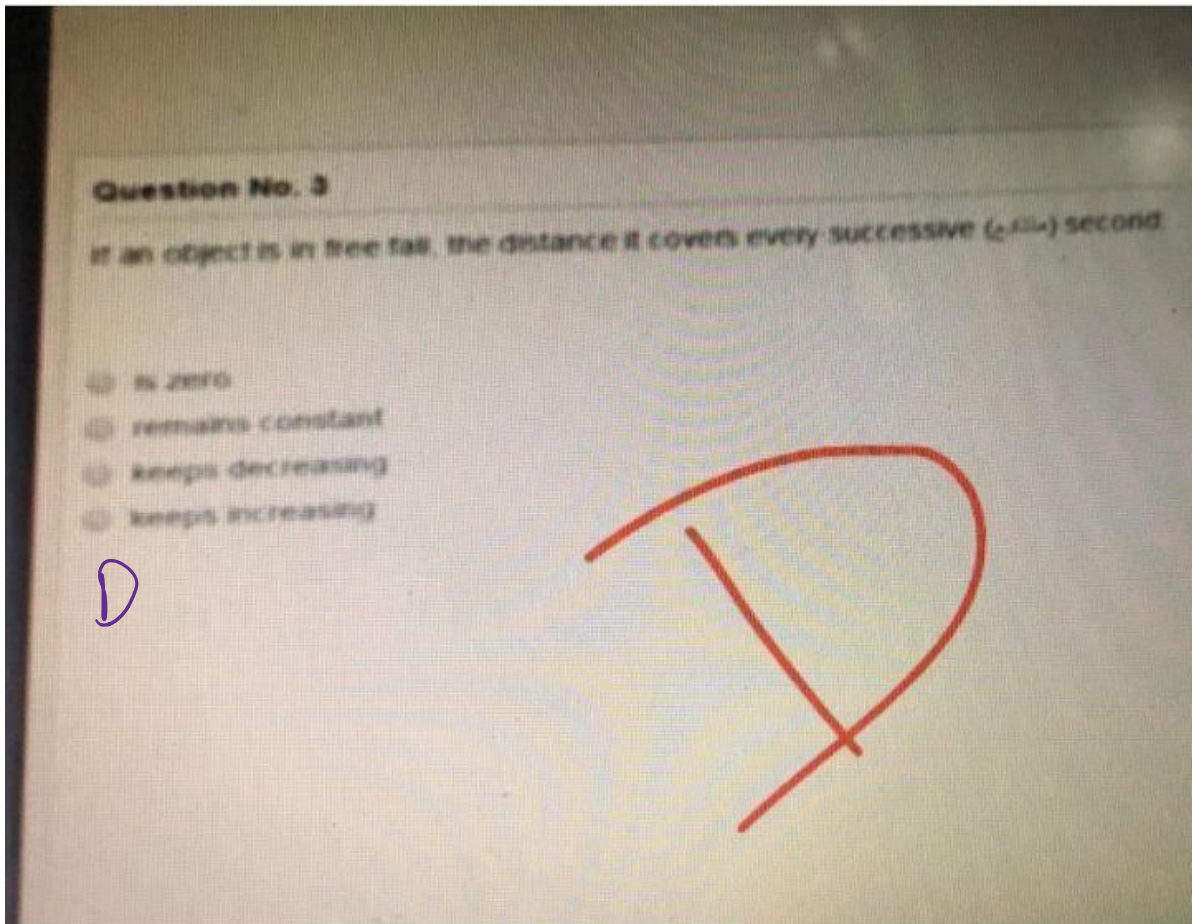
Save &amp; Next

1/22/2019 6:20

MKCL OES Exam Client Version 2.0.0.1

HP Compaq LE1711

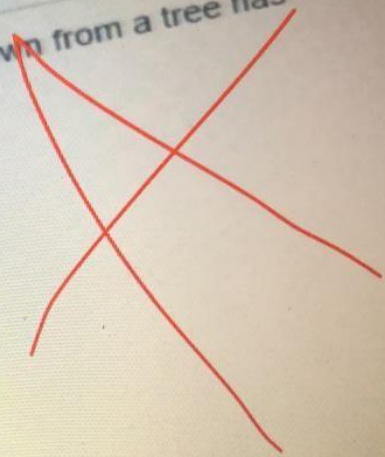




Question No. 14

Before reaching the ground, an apple falling down from a tree has

- both potential and kinetic energy
- no energy
- potential energy only
- kinetic energy only



A



Question No



Total questions in exam: 25 | Answered: 0

If a stone drops in a free fall from the edge of a mountain, the distance it covers after 8 seconds is (use  $g = 10 \text{ m/s}^2$ ):

- 80 m  
 32 m  
 320 m  
 420 m

C

$$t = 8$$

$$g = 10$$

$$s = ?$$

$$v_i = 0$$

$$\therefore v \text{ \u00d7 } \bar{v} \text{ sles -1}$$

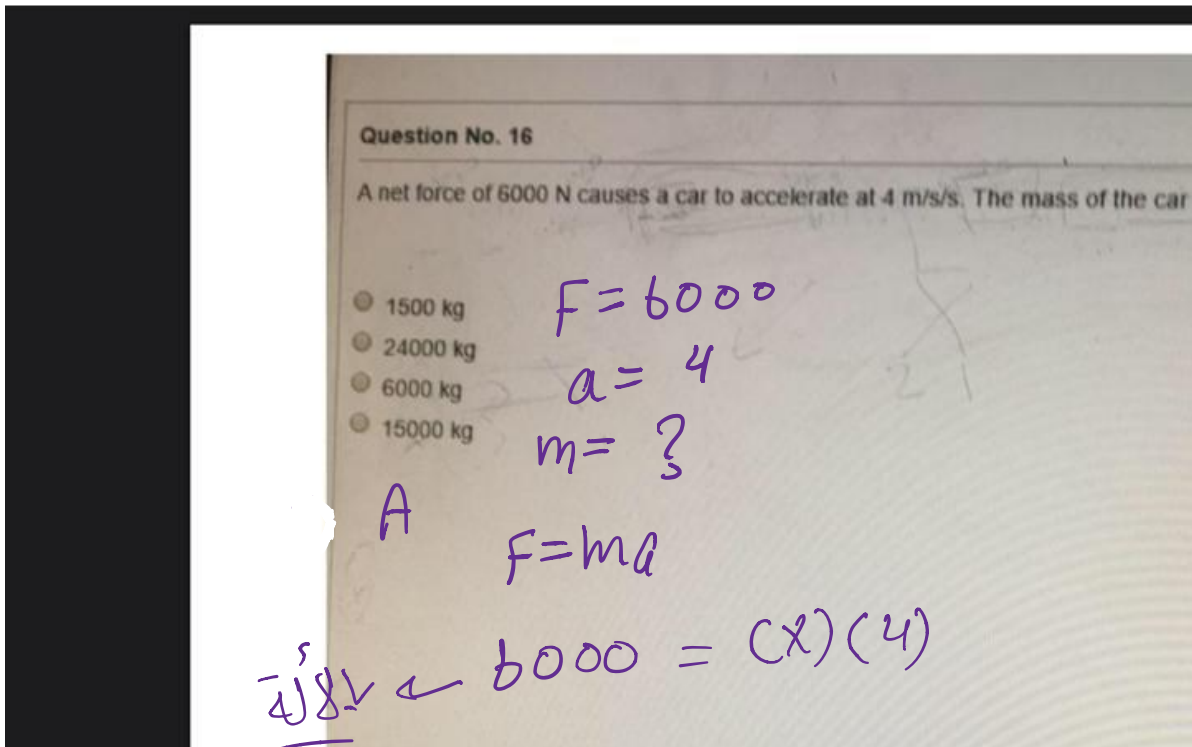
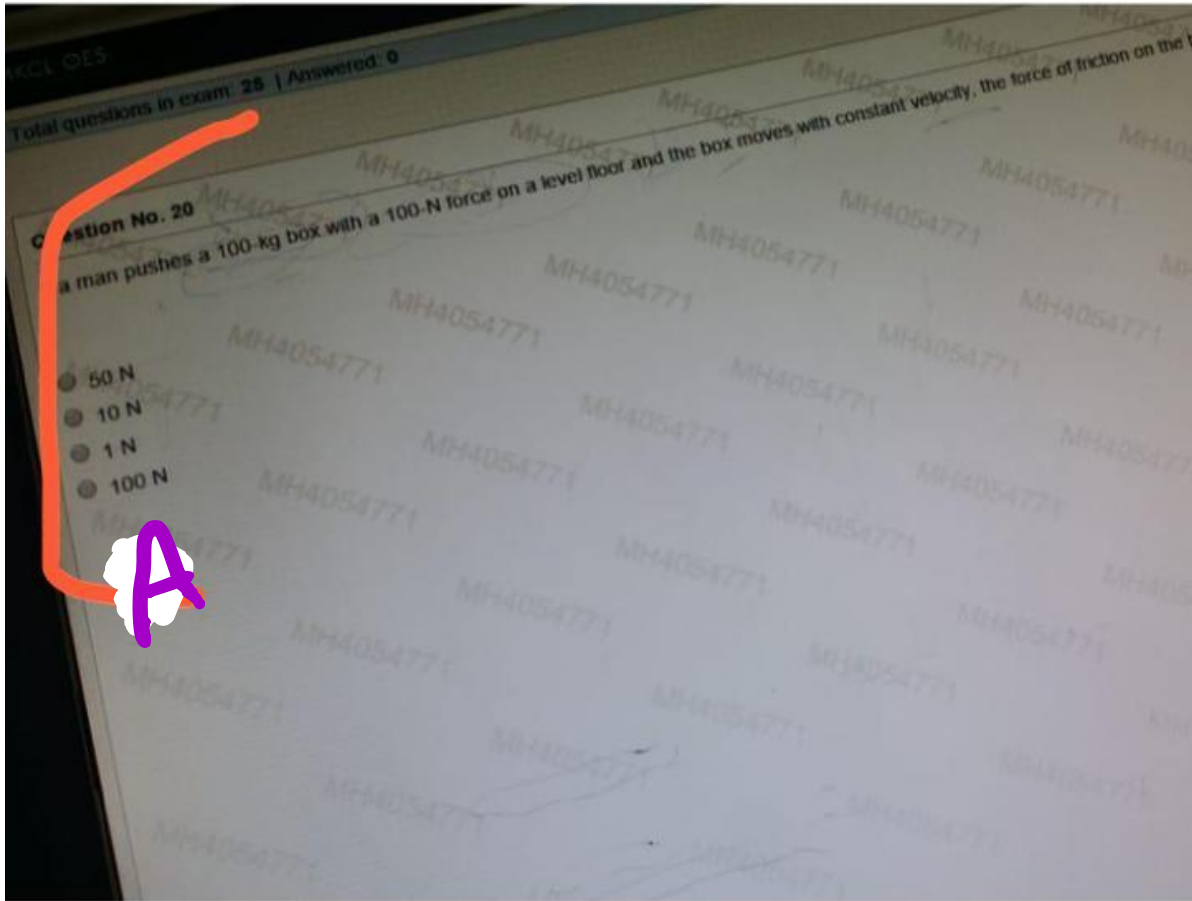
$$v_f = v_i + at$$

$$v_f = 80$$

$$\therefore s \text{ \u00d7 } \bar{v} \text{ sles -2}$$

$$s = \frac{1}{2} (v_f + v_i) t$$

$$= 320$$



Question No. 6

A<sup>-</sup> A A<sup>+</sup>

"If no net force acts on an object, it will move at constant velocity" is a statement of:

- Pythagoras principle
- Newton's first law
- Newton's second law
- Newton's third law

B

Save & Next

HP Compaq LE1711

hp

A 15-N object is freely falling from a height of 100 m. Its kinetic energy after it falls 25% of its initial height is:

- 175 J
- 375 J
- 50 J
- 150 J

$$h = 25$$

$$F = 15$$

$$KE = ?$$

B

$$m = \frac{15}{10} = 1.5$$

$$v = \sqrt{2gh} = 22.4$$

$$KE = \frac{1}{2} m v^2$$

ΔJ ✓

$$X = \frac{1}{2} (1.5) \times (22.4)$$



Total questions in exam: 25 | Answered: 22

Question No. 15

A ball is dropped from the top of a building. It has a velocity of 31 m/s when it hits the ground? In order to find how tall is the building we can use two of the following equation:

1. $V_f = V_i + a.t$	2. $S = vt + \frac{1}{2}gt^2$	3. $g = 9.8 \text{ m/s}^2$
4. $V_f = g.t$	5. $S = \frac{1}{2}gt^2$	6. $v_f^2 - v_i^2 = 2 a.s$

- only 3
- 1 and 3
- only 5
- 4 and 5

D

Save &amp; Next

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

- 1 R
- 32 °F
- 1°C
- 10 K

Save & Next

HP Compaq LE1711

hp

F6

F6

F7

F8

F9

F10

^ ^

& &

\* \*

( (

) )

- -

+ +

6 7

7 Y

8 A

9 9

0 .

- -

+ +

Question No. 9

As a vase is falling down from a high building, its:

- potential and kinetic energies are always equal.
- potential energy increases
- kinetic energy decreases
- potential energy decreases

D

Save & Next



Question No. 23

Temperature scales that give the same temperature difference  $\Delta T$  are the:

- Kelvin and Celsius
- Celsius and Joule
- Fahrenheit and Kelvin
- Celsius and Fahrenheit

A

Total questions in exam: 28 | Answered: 8

Question No. 19

An object travels in straight line and increases its speed uniformly from 20 m/s to 30 m/s after covering 100 m. Its acceleration is:

- 4 m/s/s
- 2.5 m/s/s
- 0.25 m/s/s
- 1 m/s/s

B

$$v_i = 20$$

$$v_f = 30$$

$$s = 100$$

$$a = ?$$

∴ 6 marks

$$2as = v_f^2 - v_i^2$$

$$\underline{\underline{2(2.5)(100) = 30^2 - 20^2}}$$

Question No. 5

A car is moving with 110 km/h for two hours and then took a rest for 30 min. The car then continues with 120 km/h for an hour. The average speed for this journey is approximately:

- 85 km/h
- 110 km/h
- ✓ 97 km/h
- 75 km/h

C

$$110 \text{ km/h} \times 2 \text{ h} = d = 220$$

$$0 \text{ km/h} \times \frac{1}{2} \text{ h} = d = 0$$

$$120 \text{ km/h} \times 1 = d = 120$$

$$\sqrt{2} \quad \frac{220 + 0 + 120}{2 + \frac{1}{2} + 1} = \underline{\underline{97.14}}$$

Save & Next

HP Compaq LE1711



Total questions in exam: 25 | Answered: 10

Question No. 22

A pile driver falls freely from a height of 5 m above a pile. Its velocity as it hits the pile is:

- 10 m/s
- 8 m/s
- 2 m/s
- 4 m/s

A

$$h = 5$$

$$g = 10$$

$$v = ?$$

$$v = \sqrt{2gh}$$

Total questions in exam: 25 | Answered: 0

Question No. 4

If the speed of an object increases five times, its kinetic energy increases:

- 2.5 times
- 25 times
- 5 times
- 10 times

B

B



Question No. 3

If a rock falls from a balcony and hits the ground with the speed of 10 m/s, the balcony's height is

- 10 m
- 5 m
- 40 m
- 20 m

$$v = 10$$
$$h = ?$$
$$g = 10$$

B

$$v = \sqrt{2gh}$$

$$10 = \sqrt{(2)(10)(x)}$$

↓

$$\underline{\underline{4.984}}$$

Save & Next

10.65.7.215

HP Compaq LE1711



Total questions in exam: 25 | Answered: 6

Question No. 2

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:

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

$$\begin{array}{ccc} 100^\circ\text{C} & & 180^\circ\text{F} \\ & \searrow & \swarrow \\ & 75 & ? \end{array}$$

B

$$= \frac{180 \times 75}{100}$$

Save & Next

Question No. 18

A temperature difference of 100 degrees Celsius is equivalent to a temperature difference of 180 degrees Fahrenheit. This means that a temperature difference of 7 degrees Celsius is equivalent to:

- 18 degrees Fahrenheit
- ✓ 12.6 degrees Fahrenheit
- 9 degrees Fahrenheit
- 20 degrees Fahrenheit

$$\begin{array}{ccc} 100^{\circ}\text{C} & \times & 180^{\circ}\text{F} \\ 7 & & ? \end{array}$$

B

$$= \frac{180 \times 7}{100}$$

HP Compaq LE1711

Total questions in exam: 28 | Answered: 0

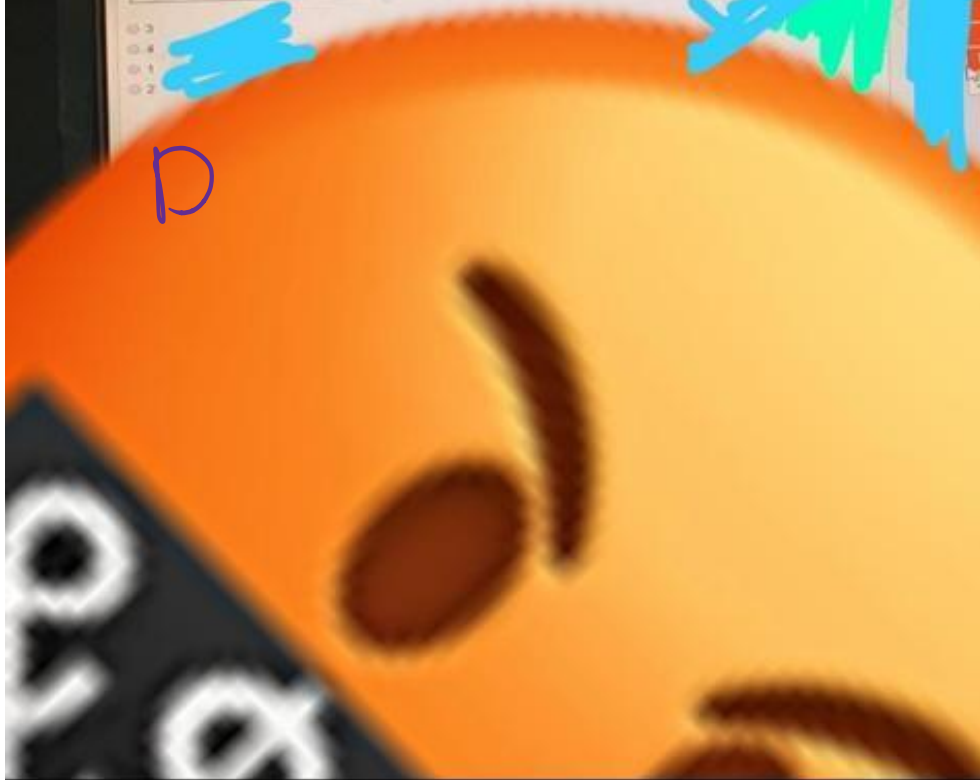
Question No. 22

A pile driver falls freely from a height of 50 m above a pile. Its velocity as it hits the pile could be directly calculated using equations:

1. $V_f = V_i + a.t$	2. $V_f = \sqrt{2 a.h}$	3. $V = \frac{s}{t}$
4. $S = \frac{1}{2} a.t^2 + v_i.t$	5. $V = \frac{v_f^2 - v_i^2}{2 a}$	6. $v_f^2 - v_i^2 = 2 a.s$

- 3
- 4
- 1
- 2

D



Total questions in exam: 25 | Answered: 0

## Question No. 8

How many kilocalories of heat must be added to 10 kg Tungsten to raise its temperature by 230 Fahrenheit?

(The specific heat of Tungsten is  $c = 0.134 \text{ J/g} \cdot ^\circ\text{C}$  and  $\Delta T_F = 1.8 \Delta T_C$ )

- 4.09 kcal
- 409 kcal
- 0.409 kcal
- 40.9 kcal

D

$$q = ?$$

$$m = 10000$$

$$C = 0.134$$

$$T = \frac{230}{1.8}$$

$$q = mC\Delta T$$

$$= 171222.22$$

kcal بعدن تحويل

Save & Next

Shif 8 39

بعدن تقسم على

kcal 1000

Total questions in exam: 25 | Answered: 3

Question No. 3

A car is moving with 60 km/h for 20 min and then with 90 km/h for another 40 min and then look a rest for 30 min. The car then continues with 120 km/h for three hours. The average speed for this journey is approximately.

- 66.7 km/h
- 90 km/h
- 97.8 km/h
- 70 km/h

C

60 km/h	d = 20
$\frac{1}{3}$ h	
90	d = 60
$\frac{2}{3}$	
0	d = 0
$\frac{1}{2}$	
120	d = 360
3	

$$\frac{20 + 60 + 0 + 360}{\frac{1}{3} + \frac{2}{3} + \frac{1}{2} + 3} = 97.77 = 97.8$$

Save & Next

PL1710



+966 54 726 4307

أمس ١٠:٤٩ م



AKCL OES

Question No. 11

If there is a net force acting on a moving object, the object must be:

- large
- accelerating
- small
- moving with constant velocity

B

FINAL PHY2018\_S.pdf

Question No. 18

Vaporization is the change of phase from



Question No. 5

A car is moving with 110 km/h for two hours and then took a rest for 30 min. The car then continues with 120 km/h for an hour. The average speed for this journey is approximately.

- 85 km/h
- 110 km/h
- 97 km/h
- 75 km/h

C

110 km	$d = 220$
2	
0	$d = 0$
$\frac{1}{2}$	
120	$d = 120$
1	

$$220 + 0 + 120$$

$$\frac{2 + \frac{1}{2} + 1}{}$$

Save & Next

HP Compaq LE1711





MKCL OES

Physics\_Quiz2\_S

Total questions in exam: 25 | Answered: 0

Question No. 15

The power needed to speed up a 1000-kg car from zero km/h to 72 km/h in 10 seconds is:

- 40 kW
- 20 kW
- 50 kW
- 30 kW

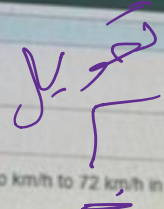
B

$P = ?$   
 $m = 1000$

$v_i = 0$   
 $v_f = 20$   
 $t = 10$

$S = ?$   
 $a = ?$

$a = \frac{v_f - v_i}{t}$   
 $a = 2$



B

$s = \frac{1}{2}(v_f + v_i)t$   
 $s = 100$

$P = \frac{W}{t}$

$P = \frac{mgs}{t}$   
 $P = \frac{1000 \times 2 \times 100}{10}$

$P = \frac{20000}{1000}$   
 $= 20$

Question No. 25

If a car's average speed is 40 m/s on a 5-hour trip, the total distance it covers is:

- 540 km
- 450 km
- 504 km
- 720 km

D

$$40 \times 5 = 200$$

Save &amp; Next

Question No. 1

A temperature difference of 100 degrees Celsius is equivalent to a temperature difference of 180 degrees Fahrenheit. This means that a temperature difference of 3 degrees Celsius is equivalent to:

- 45 degrees Fahrenheit
- 25 degrees Fahrenheit
- 54 degrees Fahrenheit
- 5.4 degrees Fahrenheit

D

$$\begin{array}{ccc} 100 & & 180 \\ & \swarrow & \searrow \\ & 3 & ? \end{array}$$

$$\begin{array}{r} 180 \times 3 \\ \hline 540 \end{array}$$

Total questions in exam: 25 | Answered: 0

Question No. 15

If no net force acts on a moving object, it will have:

- increasing acceleration
- zero velocity
- increasing velocity
- no acceleration

D

Save & Next

Question No. 19

A 1500-kg car with kinetic energy of 780 kJ is approximately going with a speed of:

- 116 m/s
- 32 km/h
- ✓ 116 km/h
- 90 km/h

$$m = 1500 \quad v = ?$$

$$K_E = 780$$

C

$$K_E = \frac{1}{2} m v^2$$

$$\sqrt{780} = \frac{1}{2} (1500) (x)$$

$\sqrt{780}$   
=

Save & Next

HP Compaq LE1711

**Question No. 9**

If no external forces act on a moving object, it will have:

- zero velocity
- increasing velocity
- increasing acceleration
- zero acceleration

D

Total questions in exam: 25 | Answered: 15

Question No. 3

A 5-N object is freely falling from a height of 20 m. Its speed after it loses 25% of its initial potential energy is approximately

- 25 m/s
- 20 m/s
- 75 m/s
- 10 m/s

D

Question No. 9

You raised a 10-kg object to a height of 2 m, and your friend raised a 30-kg object to the same height. The work done

- double your work
- three times your work
- half your work
- same as your work

B

B

Question No. 10

A freight elevator with operator weighs 4000 N. If it is raised to a height of 20 m in 10 s, how much power is developed?

- 20 W
- 80 kW
- 200 W
- 8 kW

$$P = \frac{FS}{t}$$

D

D

Question No. 11

A temperature of 30 °C equals:

- 30 °F
- 2 °F
- 303 °F
- 86 °F

D

D



Question No. 8

The time taken by a 8-kW motor to raise a 1000-kg mass to a platform 10 m above the floor is:

- 20 s
- 12.5 s
- 10 s
- 15 s

B

Save & Next

HP Compaq LE1711

hp

Question No. 21

A A A+

The kinetic energy of a 2-kg object is 1 J. When this kinetic energy is tripled (becomes three times), the speed is: 2

- 4.4 m/s
- 2.4 m/s
- 1.7 m/s
- 3.7 m/s

$$m = 2$$

$$KE = 1^3$$

$$C =$$

$$1^3 = (2)(v)^2$$

وذا

Save &amp; Next

HP Compaq LE1711



Question No. 14

A painter of mass 68 kg climbs to a height of 5 m on a ladder. What is the increase in gravitational potential energy of the painter?

- 3.15 J
- 31.5 kJ
- 31.5 J
- ✓ 3.4 kJ

D

$$mgh$$

==

په پلین وقت

۱۰۰۰

==

Save & Next

HP Compaq LE1711



Question No. 10

A

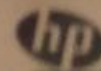
Gravitational potential energy of an object is due to its:

- internal structure
- position
- speed
- acceleration

B

Save & Next

HP Compaq LE1711



F5

F6

F7

F8

F9

F10

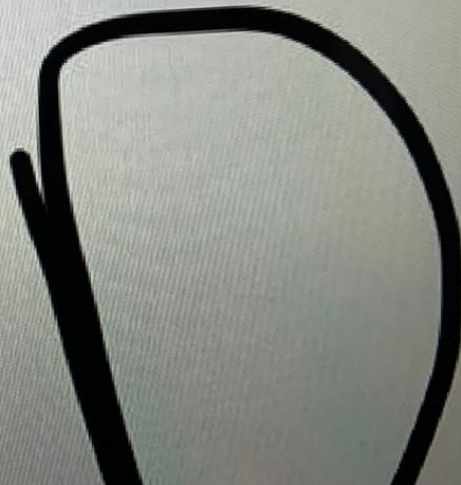
Questions in Exam. 25 | Answered: 0

**Question No. 20**

A rock falls from an edge of a mountain 45 m above the ground. Find its speed as it hits the ground? (use  $g = 10 \text{ m/s}^2$ )

- 40 m/s
- 20 m/s
- 10 m/s
- 30 m/s

D



PROBLEMS  
Online Evaluation System

Total questions in exam: 25 | Answered: 0

Physics\_Quiz2\_Ser

Question No. 16

A force of 1000 N is making an angle of  $60^\circ$  with the direction of motion of an object. If the work done is 500 kJ, the distance moved is:

- 2 km
- 1 km
- 0.5 km
- 1.5 km

B

B

1:09

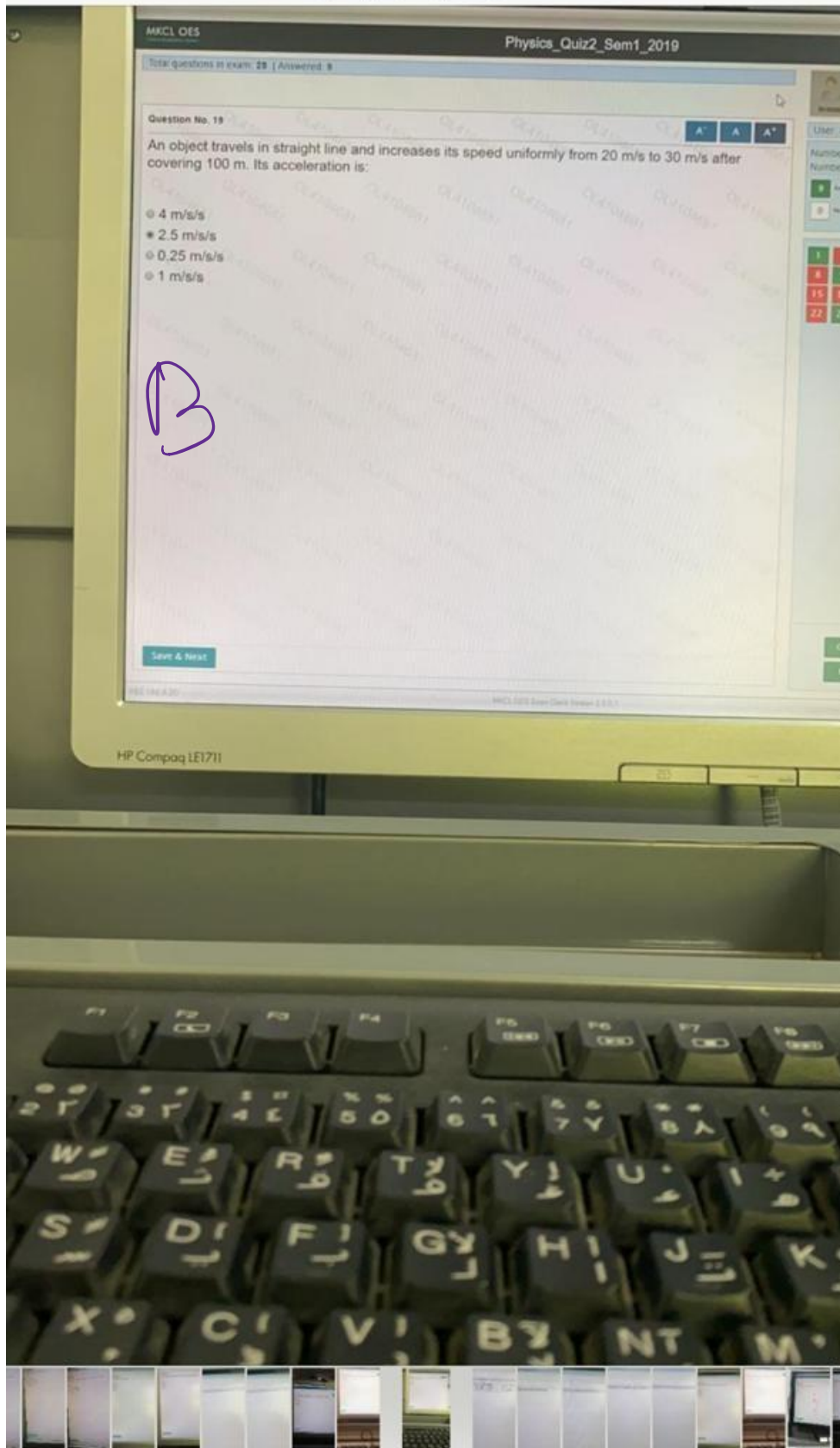
4G



My soulmate

19/11/2019, 1:00 PM

All Media



Total questions in exam: 25 | Answered: 1

**Question No. 2**

As an object is freely falling its acceleration is:

- increasing.
- zero.
- positive and constant.
- decreasing.

C



Question No. 3

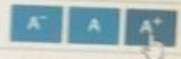
If a stone drops in a free fall from the edge of a mountain, how long does it take to fall 125 m: (use  $g = 10 \text{ m/s}^2$ )

- 10 s
- 5 s
- 25 s
- 15 s

B

B

Question No. 12



Two workers push in the same direction on a box against a frictional force of 700 N. If one pushes with a force of 500 N and the other with a force of 400 N, the net force is:

- 800 N
- 200 N
- 1600 N
- 600 N

$$500 + 400$$

$$- 700$$

B

Save & Next

HP Compaq LE1711





MCQ QUESTIONS

Total questions in exam: 25 | Answered: 6

Question No. 4

When you fire a bullet from a handgun, the recoil you feel is called the:

- action
- the fraction of force
- gravitation attraction
- reaction



Save & Next



Question No. 2

A car is moving with 70 km/h for 45 min and then took a rest for 30 min. The car then continues with 120 km/h for two hours. The average speed for this journey is approximately:

A<sup>-</sup> A A<sup>+</sup>

- 100 km/h
- 110 km/h
- 75 km/h
- 90 km/h

D

$70 \times \frac{3}{4}$ <hr style="border: 0.5px solid black;"/> $120 \times \frac{1}{2}$ <hr style="border: 0.5px solid black;"/> $120$	$52.5$          $240$	$52.5 \times 0 + 240$ <hr style="border: 0.5px solid black;"/> $\frac{3}{4} + \frac{1}{2} + 2$
$2$		



Total questions in exam: 25 | Answered: 0

Question No. 8

How many mega-joules of heat must be given off by 7.0 kg of water (specific heat = 4190 J/kg °C) to cool it from 75 to 10°C?

- 19.1 MJ
- 7.23 MJ
- 1.91 MJ
- 4.53 MJ

تقویریں مبارک

$$Q = (M \Delta T)$$

۱۹.۱

\* ماہرین  
سینج  
۱۹.۱



Question No. 3

A 1000-kg car that has kinetic energy of 450 kJ is going with a speed of:

- 144 km/h
- 120 km/h
- 108 km/h
- 130 km/h

$$m = 1000$$

$$v = ?$$

$$KE = 450000$$

C

$$KE = \frac{1}{2}mv^2$$

km/h,  $v \approx 30$

Question No. 20

The kinetic energy (KE) of a 1.5 ton car traveling at a speed of 30 m/s can be obtained using the following equation(s):

1. $P = PE/t$	2. $E = PE + KE$	3. $P = W/t$
4. 1 ton = 1000 kg	5. $KE = \frac{1}{2}mv^2$	6. 1 m/s = 3.96 km/h

- 3,5 and 6
- 2 and 6
- 1 and 2
- 4 and 5

D



Question No. 10

A large stone at rest on top of a hill possesses

- kinetic energy
- both potential and kinetic energy
- no energy
- potential energy

D

Question No. 1

During change of phase of a substance, its temperature

- changes rapidly
- decreases
- increases
- remains constant

D

Total questions in exam: 25 | Answered: 7

An object is thrown vertically upward. During its journey downward, the speed is: (neglect air resistance)

- constant
- zero
- decreasing
- increasing

↓  
Speed  
=

D

Question No. 1

Condensation is the change of phase from

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

C11

A

Save & Next

Question No. 19

An object travels in straight line and increases its speed uniformly from 20 m/s to 30 m/s after covering 100 m. Its acceleration is:

- 4 m/s/s
- 2.5 m/s/s
- 0.25 m/s/s
- 1 m/s/s

$$u_i = 20$$

$$u_f = 30$$

$$a = ?$$

$$s = 100$$

Save &amp; Next

Question No. 3

Which of the following temperatures is NOT possible now to measure?

- 278 °C
- 7645 °C
- 200 °C
- 274 °F

A

Save & Next

Question No. 13

The gravitational potential energy of an object is related to its mass as follows:

- The potential energy depends on the square of the mass
- The larger the mass the smaller the potential energy
- The potential energy does not depend on the mass
- The larger the mass the larger the potential energy

D  
11

Question No. 25

The height a 20-kW motor can lift a 1000-kg mass to in 20 seconds is:

- 10 m
- 30 m
- 50 m
- 40 m

$$P = \frac{W}{t} = \frac{mgh}{t}$$

$$= 40 \text{ m}$$

==

20 000





9 من 10

تم



MKCL OES

Question No. 15

The kinetic energy of a 2-kg object is 1 J. When this kinetic energy is doubled, the speed

- 1.4 m/s
- 2.4 m/s
- 4.4 m/s
- 3.4 m/s

$KE = 1$   
 $m = 2$

$KE = \frac{1}{2}mv^2$

A =



Question No. 25

If a car's average speed is 40 m/s on a 5-hour trip, the total distance it covers is:

- 540 km
- 450 km
- 504 km
- 720 km

D

$$v = 40$$

$$t = 5h \rightarrow 18000$$

$$s = ?$$

من قانون السرعة

$$v = \frac{d}{t} \rightarrow \text{نفسها}$$

Save & Next

HP Compaq LE1711

720000 كيلومتر

1000



F6

F6

F7

F8

F9

F10

Question No. 16



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

- 0 °F
- 273 °F
- 460 °F
- 273 °F

C  
=

Save & Next

HP Compaq LE1711



Total questions in exam: 25 | Answered: 3

Question No. 23

The newton (N) is the unit of force, which can be expressed in the SI base as:

- kg m s
- kg m/s/s
- kg m/s
- kg s/m

B

Save &amp; Next

HP Compaq LE1711

hp



Question No. 6

A force is applied on an object and the object did not move. The opposing friction is called:

- kinetic friction
- dynamic friction
- static friction
- internal friction

MC

Question No. 8

An object that has small inertia must have:

- small mass
- small volume
- small area
- big mass

A

Total questions in exam: 28 | Answered: 24

Question No. 8

If a net force of 100 N causes a crate to accelerate at 0.9 m/s/s, the crate's mass is:

- 80 kg
- 11 kg
- 111 kg
- 50 kg

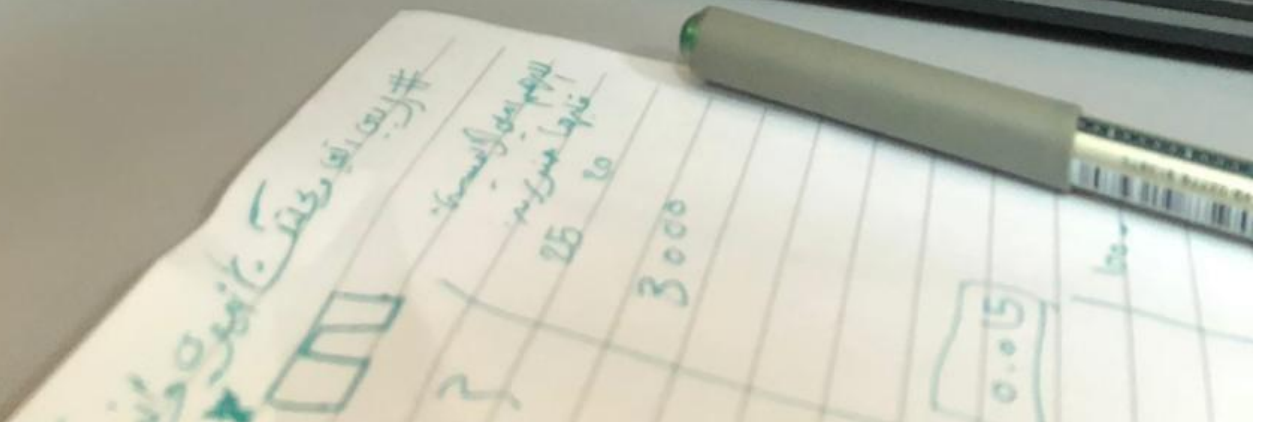
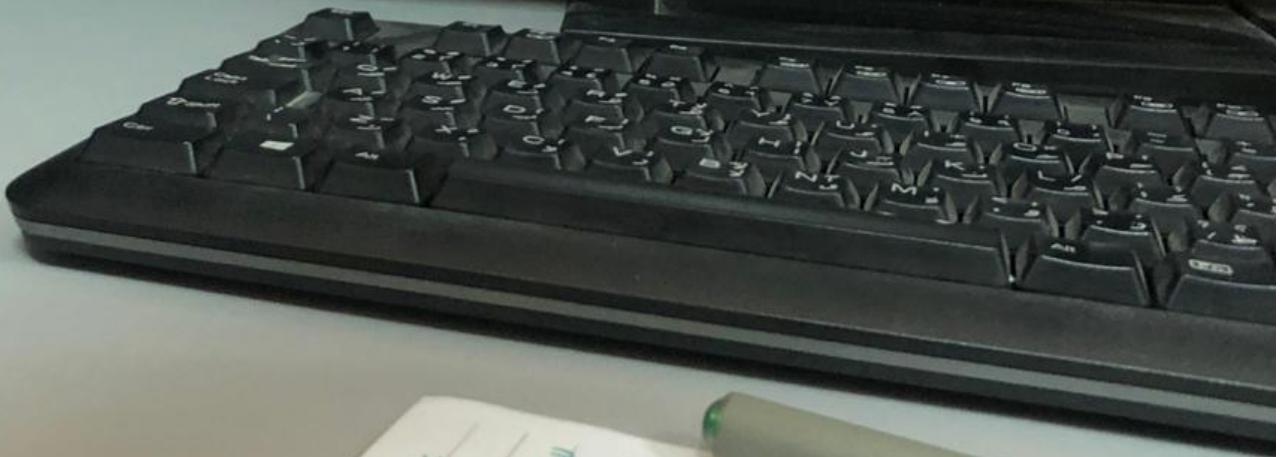
C →

$$F = 100$$

$$a = 0.9$$

$$m = ?$$

$$F = ma$$



Question No. 3

The unit of Work is:

- N.m
- J.m
- Watt
- Newton

A



Total questions in exam: 25 | Answered: 23

Question No. 3

The kinetic energy of a 10,000-kg pile driver when it strikes a pile with velocity 10.0 m/s is:

- 50 J
- 0.5 kJ
- 50 kJ
- 0.5 MJ

C  
=

$$m = 10000 \text{ kg}$$

$$v = 10$$
$$K_E = ?$$

$$K_E = \frac{1}{2} m v^2$$

ببین جواب

Save &amp; Next

User O

Number  
Number

23 Answer

0 Not V

1 2

8 9

15 16

22 23

Activate

Go to Settings

NOTE

Total questions in exam: 25 | Answered: 0

Question No. 2

4580 cal of heat is equivalent to:

- 200.2 kJ
- 19.2 kJ
- 33.5 kJ
- 31.7 kJ

B

Question No. 22

Which of the following is not a unit for the amount of heat:

- Joule
- BTU
- Calorie
- Fahrenheit

D

Total questions in exam: 25 | Answered: 0

Question No. 5

In the Celsius temperature scale, the absolute zero is at:

- 273 °C
- 0 °C
- 100 °C
- 273 °C

A

Save & Next

Question No. 1

Newton's third law states that for a force ( $F_1$ ) applied from object A on object B, there is a force ( $F_2$ ) applied from B on A such that:

- $F_1 + F_2 = 1$
- magnitude of  $F_1 <$  magnitude of  $F_2$
- magnitude of  $F_1 =$  magnitude of  $F_2$
- magnitude of  $F_1 >$  magnitude of  $F_2$

C  
11

Question

A temperature of 150 °C equals:

- 302 °F
- 320 °F
- 203 °F
- 220 °F

Shif 8 38

A

Question No. 3

A car is moving with 100 km/h for 30 min and then took a rest for 30 min. The car then continues with 100 km/h for two hours. The average speed for this journey is approximately:

- 75 km/h
- 100 km/h
- 110 km/h
- 83.3 km/h

D

$$\begin{array}{l} \sqrt{1} \ 50 \\ \sqrt{2} \ 0 \\ \sqrt{3} \ 200 \end{array} \left. \vphantom{\begin{array}{l} \sqrt{1} \\ \sqrt{2} \\ \sqrt{3} \end{array}} \right\} \frac{50 + 0 + 200}{\frac{1}{2} + \frac{1}{2} + 2}$$

$$= 83.\overline{33}$$

Question No. 22

A

The unit of the coefficient of friction is:

- m/s/s
- newton
- Newton/s
- has no units

D

Save & Next

HP Compaq LE1711





Question No. 20

If you do a work of 280 J to place a 10 kg box on top of a shelf, the height of this shelf is:

- 1.9 m
- 2.5 m
- 1.0 m
- 2.8 m

D  
=

$$w = 280$$

$$m = 10$$

$$h = ?$$

$$a = 10$$

$$w = mgh$$

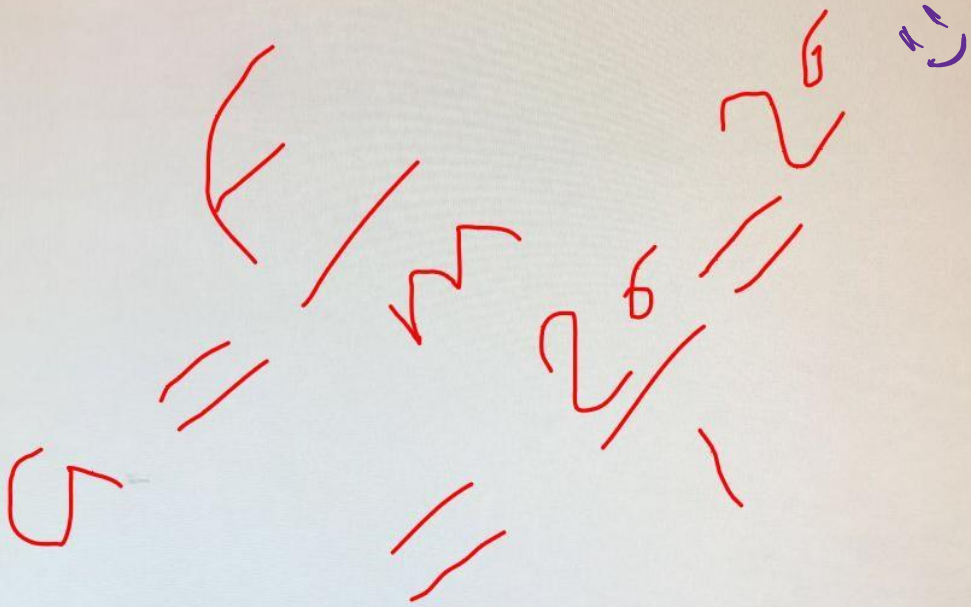
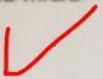
Save & Next

HP Compaq LE1711

Question No. 7

An object has a weight ( $mg = 10\text{ N}$ ). It moved by the effect of a single force of  $20\text{ N}$ . The acceleration of the object is:

- 10 m/s/s
- 2 m/s/s
- 5 m/s/s
- 20 m/s/s



Total questions in exam: 25 | Answered: 10

**Question No. 23**

Gravitational potential energy of an object is due to its:

- internal structure
- acceleration
- speed
- position

D

Total questions in exam: 25 | Answered: 0

## Question No. 16

A large steel wrecking ball is raised to a height of 25 m in 20 s using a power of 3000 W. The mass of the ball is:

- 100 kg
- 240 kg
- 20 kg
- 200 kg

B

$$\begin{aligned} h &= 25 \\ t &= 20 \\ P &= 3000 \\ m &= ? \end{aligned} \quad \left. \vphantom{\begin{aligned} h &= 25 \\ t &= 20 \\ P &= 3000 \\ m &= ? \end{aligned}} \right\} P = \frac{W}{t} \rightarrow mgh$$
$$= 3000 = \frac{(x) \times 10 \times 25}{20}$$
$$= 240 \text{ kg}$$

**Question No. 14**

The law of conservation of mechanical energy when no resistant forces do work says

- kinetic energy = the potential energy
- kinetic energy + the potential energy = power
- kinetic energy + the potential energy = constant
- (kinetic energy + the potential energy) is not constant

11

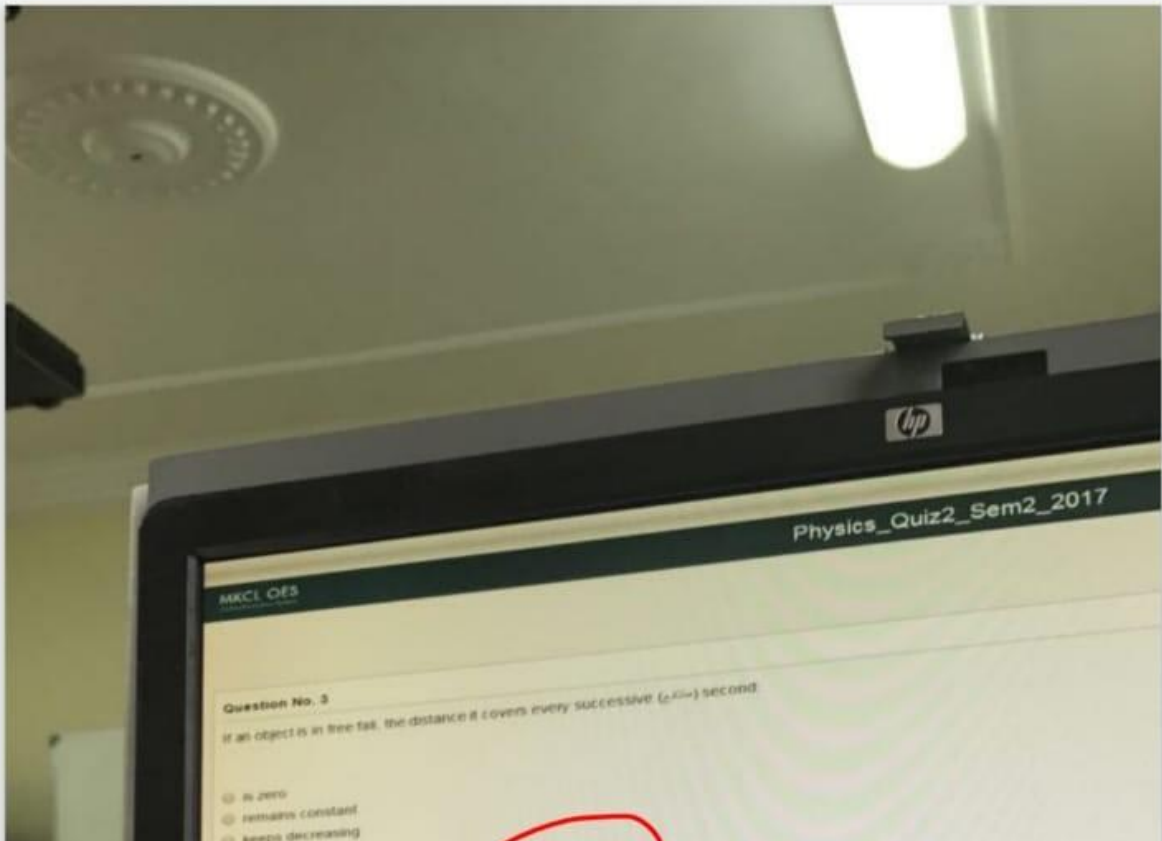
Question No. 5

The friction force always acts in a direction:

- same as the direction of weight
- normal to the surface
- opposite to the direction of motion
- same as the direction of motion

مکرر

C



Question No. 3

If an object is in free fall, the distance it covers every successive  $(t^{th})$  second

- is zero
- remains constant
- keeps decreasing

CM

Question No. 1  
An object travels in straight line with a constant speed of 40 m/s for 20 minutes. During this time, its acceleration is

- 0.5 m/s/s
- 1 m/s/s
- 0 m/s/s
- 2 m/s/s

$$V_i = 0$$
$$V_f = 40$$

$$t = 20$$

↓

$$1200$$

$$a = ?$$

$$a = \frac{V_f - V_i}{t}$$

$$a = \frac{40 - 0}{1200}$$
$$= 0,033$$
$$= 0$$