

تجميعات " ريفان و ود "

دعواتكم 🙏❤️❤️.

PHYSICE

2020

Question No. 28

Radioactive decay is a \_\_\_\_\_ phenomenon :

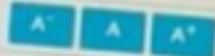
- Harmless
- natural
- Warm
- Unnatural

Of these, the most harmful radiation to people is:

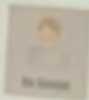
- 2 rad alpha + 1 rad beta
- 2 rad alpha + 2 rad beta
- 1 rad alpha + 10 rad beta
- 3 rad alpha + 5 beta

Question No. 30

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 Fahrenheit is equivalent to:



- 1.7 degrees Celsius
- 26.7 degrees Celsius
- 16.7 degrees Celsius
- 36.7 degrees Celsius



User: OL410533

Number of main q  
Number of question

15 Answered

0 Not visited





Total questions in exam: 40 | Answered: 0

Question No. 6

An isotope has a half-life of 15 years. If the initial amount of radioactivity is 1.0 unit, the amount of that isotope remaining at the be

- 0.5
- 0.25
- 1.0
- 0.0

Question No. 6

Which of the following temperatures is NOT possible?

- 4500 °C
- 278 °C
- 274 °F
- 200 °C

Total questions in exam: 40 | Answered: 15

### Question No. 24

The following type of radiation can be stopped by a piece of paper.

- alpha rays
- beta rays
- gamma rays
- x-rays



Question No. 33

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



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



User: O

Number:

Number:

15

0

1

2

Question No. 21

If a 5 N force applied on a 20 cm spring compresses it to 18 cm, a 25N compressing force, applied on it within its elasticity range,

- 20 cm
- 15 cm
- 27 cm
- 10 cm

A<sup>-</sup>

A

A<sup>+</sup>

Question No. 14

If a 10N force applied on a 20 cm spring compresses it to 14 cm, a 30N compressing force, applied on it within its elasticity range, will compress it by:

- 13 cm
- 27 cm
- 18 cm
- 15 cm



Total questions in exam: 40 | Answered: 0

Question No. 2

A

A

A

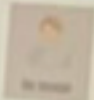
The half-life of Cs-137 isotope is 30 years. If the initial amount of this isotope is 50 units, the remaining radioactive amount of this isotope at the end of 30 years will be

- 50
- 12.5
- zero
- 25

## Question No. 25

An object is placed 20 cm in front of a convex mirror. If an image is formed with a magnification of  $M = +1/5$ , the focal length of this mirror is:

- 20 cm
- 5 cm
- 10 cm
- 15 cm



User OL41

Number of n

Number of q

15 Answered

0 Not Visited

1 2 3



Question No. 23

Two equal electric charges separated by a distance of 4 cm repel each other by a force of 90 N. The magnitude

- 4  $\mu\text{C}$
- 1  $\mu\text{C}$
- 3  $\mu\text{C}$
- 2  $\mu\text{C}$

Total questions in exam: 40 | Answered: 15

Phys

Question No. 37

In the Celsius temperature scale, water freezes at.

- 32 °C
- 8 °C
- 0 °C
- 6 °C

Question No. 8

---

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

- becomes zero
- decreases
- becomes negative
- increases

Total questions in exam: 40 / Answered: 15

## Question No. 29

An object's image in a plane mirror is always \_\_\_\_\_ the object.

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

- larger than
- same size as
- on the same side as
- smaller than



User: DL4106328

Number of main q.

Number of questions

15

Answered

New Marked

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

**Question No. 12**

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Radon-222 is:

- Produce in industry
- A man-made source
- A liquid substance
- a common environmental hazard

Total questions in exam: 40 | Answered: 8

Question No. 15

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

- $1.8 \times 10^{14}$  Hz
- 1800 Hz
- $5 \times 10^{14}$  Hz
- 180 Hz

Total questions in exam: 40 | Answered: 15

Question No. 31

A 12N brick with dimensions 6 cm x 9 cm x 16 cm is placed on a table. The greatest stress it can exert on the table is:

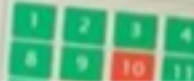
- 0.022 N/cm<sup>2</sup>
- 0.094 N/cm<sup>2</sup>
- 0.22 N/cm<sup>2</sup>
- 0.125 N/cm<sup>2</sup>

User: OL4105338

Number of main questions:  
Number of questions:

15 Answered

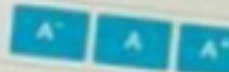
0 Not Visited



## Question No. 32

Two equal electric charges separated by a distance of 0.5 cm repel each other by a force of 360 N. The magnitude of each charge is.

- 6  $\mu\text{C}$
- 3  $\mu\text{C}$
- 9  $\mu\text{C}$
- 1  $\mu\text{C}$





Total questions in exam: 40 | Answered: 2

Question No. 11

A concave mirror has:

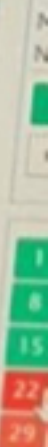
- positive focal length
- zero focal length
- negative focal length
- no focal length

Question No. 22



A wire 100 cm long has a resistance of 50 ohms at a given temperature. At the same temperature, same cross sectional area and same material, a wire of length 120 cm would have a resistance of

- 45 ohms
- 60 ohms
- 40 ohms
- 55 ohms



Question No. 23

If a support column is compressed  $\Delta l = 0.446$  mm under a weight 642 kN, its elastic constant  $k$  is :

- 1.44 MN/mm
- 1.44 kN/mm
- 1.44 N/mm
- 1.44 GN/mm

Total questions in exam: 40 | Answered: 15

## Question No. 28

Radioactive decay is a \_\_\_\_\_ phenomenon :

A+ A A+

- Harmless
- natural
- Warm
- Unnatural



User: OL41053

Number of marks

Number of ques

15 Answered

0 Not started

1	2	3
4	5	10
15	16	17
22	23	24
29	30	31
36	37	38

**Question No. 4**

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

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

Total questions in exam: 40 | Answered: 8

Question No. 12

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

- 100  $\Omega$
- 10  $\Omega$
- 1000  $\Omega$
- 1  $\Omega$

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
- $5 \times 10^{14}$  Hz
- $1.8 \times 10^{14}$  Hz

Save & Next حفظ و التالي

Question No. 33

The radiation dose of 600 rems taken within one day is:

- a lethal dose
- Not lethal dose
- Natural
- necessary for an x-ray imaging

User: AA4107473

Number of main questions: 40

Number of questions: 40

11

Answered

29

Not Answered

0

Not Visited

0

Partially Answered

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



Total questions in exam: 40 | Answered: 8

Question No. 10

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

- speed
- direction
- frequency
- wavelength

Total questions in exam: 40 | Answered: 18

Question No. 6

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

- 90°
- 30°
- 0°
- 45°

Total questions in exam: 40 | Answered: 9

Question No. 10

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

- speed
- direction
- frequency
- wavelength

Save &amp; Next

DELL

Total questions in exam: 40 | Answered: 32

Question No. 39

Three identical lamps, each of resistance  $4\ \Omega$ , are connected in series to a  $6\text{-V}$  battery. The potential difference across each lamp

- 2 V
- 12 V
- 4 V
- 6 V



Total questions in exam: 40 | Answered: 18

## Question No. 6

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

- 90°
- 30°
- 0°
- 45°

Save &amp; Next حفظ والتالي

## Question No. 34

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

- 10  $\Omega$   
 1000  $\Omega$   
 100  $\Omega$   
 1  $\Omega$

Save & Next حفظ التالي

HP Compaq LE1711

University / جامعة  
 /  
 /  
 /

Physics (PHYS-101)

### Final Exam

الاختبار النهائي

2<sup>nd</sup> Term 1436-37

Maximum Score: 40  
 (1 points / question)

Test No.  
 120 m

**IMPORTANT:** Carefully fill-in your name, student ID number, and section number.

ID #

Sec.

answered. You may scribble your calculations on the sides and back of this test

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

$$v_f = v_i + at$$

$$v_f = at; (v_i = 0)$$

$$s = v_i t + \frac{1}{2} at^2$$

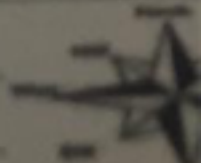
$$s = \frac{1}{2} at^2; (v_i = 0)$$

$$\text{Weight} = F_w = mg$$

$$F_f = \mu F_N$$

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

$$\text{Pythagorean Rule: } R^2 = X^2 + Y^2$$



## Question No. 32

Two equal electric charges separated by a distance of 0.5 cm repel each other by a force of 360 N. The magnitude of each charge is

- 6  $\mu\text{C}$
- 3  $\mu\text{C}$
- 9  $\mu\text{C}$
- 1  $\mu\text{C}$

[Save & Next](#)[A](#) [A](#) [A](#)

MARKS

User: OL4

Number of questions: 40

Number of questions answered: 15

Number of questions not attempted: 0

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		

[Calculate](#)  
[Resend](#)

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
- $5 \times 10^{14}$  Hz
- $1.8 \times 10^{14}$  Hz

[Save & Next](#) حفظ و التالي



## Question No. 34

Three identical lamps, each of resistance  $4\ \Omega$ , are connected in series to a  $6\text{-V}$  battery. Their equivalent resistance is

- 24  $\Omega$
- 6  $\Omega$
- 12  $\Omega$
- 4  $\Omega$

[Save & Next](#)[A](#) [A](#) [A](#)

User: CL4105328

Number of main questions

Number of questions

15 Answered

0 Not Visited

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

[Calculator](#)[Instructions](#)[Help](#)[Exit Test](#)

Total questions in exam: 40 | Answered: 15

Question No. 20

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 Fahrenheit is equivalent to:

- 1.7 degrees Celsius
- 26.7 degrees Celsius
- 16.7 degrees Celsius
- 36.7 degrees Celsius

A A A

Save & Next

User: DL410532

Number of main q

Number of question

15 Answered

0 Not Answered

1	2	3
4	5	10
15	16	17
22	23	24
29	30	31
36	37	38

Calculator

Help

Total questions in exam: 40 | Answered: 15

## Question No. 31

A 12N brick with dimensions 6 cm × 9 cm × 15 cm is placed on a table. The greatest stress it can exert on the table is:

- 0.022 N/cm<sup>2</sup>
- 0.094 N/cm<sup>2</sup>
- 0.22 N/cm<sup>2</sup>
- 0.125 N/cm<sup>2</sup>

Save &amp; Next

User: OL4105228

Number of marks: 1  
Number of questions: 15  
Answered: 15  
Not Used: 0

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

Calculator  
Help

## Question No. 33

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:

- 12 A
- 13 A
- 15 A
- 14 A

[Save & Next](#)

33/150/8/20

MKCL OES Exam/Quest Version 1.0.0.1

HP Compaq (E171)



User: QL4108328

Number of main questions: 40

Number of questions: 40

15 Correct

25 Not Attempted

0 Not Marked

0 Unlikely Answer

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		

[Calculator](#) [Instructions](#)  
[Skip](#) [End Test](#)

Time taken

61:



Question No. 26

Coulomb's force between two charges  $q_1$  and  $q_2$  separated by a distance  $r$  is inversely proportional to:

- $q_1q_2$
- $q_2$  Only
- $r^2$
- $q_1$  Only

A A A\*

User: DL410  
Number of marks: 1  
Number of questions: 40  
15 Answered  
0 Not Attempted

1	2	3
4	5	10
15	16	17
22	23	24
29	30	31
36	37	38

Save & Next

Calculator  
Help

Total questions in exam: 40 (Answered: 15)

Question No. 20

Of these, the least harmful radiation to people is

- A 2 rad alpha + 2 rad beta
- B 3 rad alpha + 2 beta
- C 1 rad alpha + 3 rad beta
- D 2 rad alpha + 1 rad beta

Save &amp; Next

Time Remaining  
60:57

User: QUM192028

Number of questions: 40

Number of questions: 40

 Correct  Incorrect Not Marked  Pending Review

Question No. 37

In the Celsius temperature scale, water freezes at:

- 32 °C
- 8 °C
- 0 °C
- 6 °C

A A A\*



User: OL4108238

Number of main questions: 40

Number of questions: 40

15 Answered

25 Not Answered

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		

Save & Next

Cancel Submit  
Skip End Test



Total questions in exam: 40 | Answered: 15

Question No. 40

A

The heat of vaporization of a liquid is the heat that 1kg of the liquid needs to

- freeze
- change to solid
- change to liquid
- change to gas

Save & Next

HP Compaq (E1771)





Question No. 5

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

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

Total questions in exam: 40 | Answered: 15

Question No. 39

A A A

If a 10N force applied on a 20 cm spring compresses it to 14 cm, a 30N compressing force, applied on it within its elasticity range, will compress it by

- 15 cm
- 13 cm
- 27 cm
- 18 cm

Save &amp; Next

User: DL4106228

Number of marks: 1

Number of questions: 1

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

Previous

Next

Total questions in exam: 40 | Answered: 1

## Question No. 4

The change of phase from solid to liquid is:

- vaporization
- solidification
- melting
- condensation



Total questions in exam: 40 | Answered: 1

## Question No. 2

An electric circuit consists of a lamp connected across the terminals of a 9-V battery. If the electric current in this circuit is 3 mA, the resistance of the lamp is:

- 30 k $\Omega$
- 3 k $\Omega$
- 30  $\Omega$
- 3  $\Omega$

A<sup>-</sup>

A

A<sup>+</sup>

User: CL405

Number of  
Number of q1  
Answered32  
Net Value1  
18  
115  
1622  
2329  
3036  
37

ارسل درشنة



Total questions in exam: 40 | Answered: 1

## Question No. 3

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

- 20 cm
- 15 cm
- 10 cm
- 30 cm



Question No. 1

How many mega-joules of heat must be given off by 7.0 kg of water (specific heat =  $4190 \text{ J/kg } ^\circ\text{C}$ ) to cool it from  $75$  to  $10^\circ\text{C}$ ?

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



ارسال در دشتة

Save & Next



Total questions in exam: 40 | Answered: 8

Question No. 13

A

A microwave signal of (10 GHz) frequency has wavelength. (use the speed  $c$  in vacuum)

- 33 cm
- 7 cm
- 13 cm
- 3 cm

Save & Next





Total questions in exam: 40 | Answered: 8

Question No. 14

The electric field around a positive point-charge ( $Q$ ) points:

- In circles around  $Q$
- toward  $Q$
- In circles outside  $Q$
- away from  $Q$

Save & Next





Total questions in exam: 40 | Answered: 8

Question No. 12

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

- 100  $\Omega$
- 10  $\Omega$
- 1000  $\Omega$
- 1  $\Omega$

Save & Next



Total questions in exam: 40 | Answered: 2

Question No. 11

A concave mirror has:

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

Save & Next



Total questions in exam: 40 | Answered: 8

Question No. 15

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

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

- $1.8 \times 10^{14}$  Hz
- 1800 Hz
- $5 \times 10^{14}$  Hz
- 180 Hz

Save & Next



Total questions in exam: 40 | Answered: 0

Question No. 2

A

A

A

The half-life of Cs-137 isotope is 30 years. If the initial amount of this isotope is 50 units, the remaining radioactive amount of this isotope at the end of 30 years will be

- 50
- 12.5
- zero
- 25





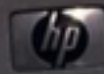
Total questions in exam: 40 | Answered: 0



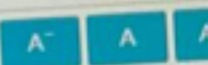
Question No. 2

Three identical lamps, each of resistance  $4\ \Omega$ , are connected in series to a 6-V battery. The potential difference across each lamp is:

- 4 V
- 2 V
- 6 V
- 12 V



Total questions in exam: 40 | Answered: 0



Question No. 4

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

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



Total questions in exam: 40 | Answered: 0

Question No. 9

A

A

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

- volt
- watt
- kWh
- kWh

Save & Next

Total questions in exam: 40 | Answered: 0

## Question No. 1

A temperature of 292 K equals:

- 27 °C
- 37 °C
- 19 °C
- 292 °C

Scientific Calculator

292°

292

MC MR MS M+ M-

sin cos tan Exp ( ) 1 ← C +/- √

asin acosh atanh log<sub>10</sub> ln log 7 8 9 / %

π x √ log<sub>10</sub> e<sup>x</sup> 10<sup>x</sup> 4 5 6 \* 1/x

tan cosh tanh x<sup>y</sup> x<sup>1/y</sup> x<sup>1/x</sup> 1 2 3 =

asin acosh atanh ∫ dx ∫ dx (x) 0 . \*



Total questions in exam: 40 | Answered: 0

Question No. 8



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

- becomes zero
- decreases
- becomes negative
- increases

Save &amp; Next



Total questions in exam: 40 | Answered: 0

Question No. 7

A

The repulsive electrostatic force is always:

- small
- negative
- positive
- big

Save & Next



Total questions in exam: 40 | Answered: 0

Question No. 5

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

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

Save & Next



Total questions in exam: 40 | Answered: 0

Question No. 3

Condensation is the change of phase from

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

Save & Next





Total questions in exam: 40 | Answered: 0



Question No. 2

Three identical lamps, each of resistance  $4\ \Omega$ , are connected in series to a 6-V battery. The potential difference across each lamp is:

- 4 V
- 2 V
- 6 V
- 12 V



Total questions in exam: 40 | Answered: 0

Question No. 6

An isotope has a half-life of 15 years. If the initial amount of radioactivity is 1.0 unit, the amount of that isotope remaining at the be

- 0.5
- 0.25
- 1.0
- 0.0

Save & Next