

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



كلية العلوم

القسم : الفيزياء

السنة : الثانية

اسئلة ووراك محلولة

اللغة التخصصية ٢

A 2 Z LIBRARY

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كلية العلوم (فيزياء ، كيمياء ، رياضيات ، علم الحياة)

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A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

1- Read the following text then choose the correct answer A, B, or C :

Atomic physics is the field of physics that studies atoms . It refers to the study of atomic structure and the interaction between atoms . It is concerned with the way in which electrons are arranged around the nucleus and the processes by which these arrangements change . This term can be associated with nuclear power and nuclear weapons . Nuclear physics studies nuclear reactions and special properties of atomic nucleus . Atom consists of one single nucleus surrounded by one or more bound electrons . Any quantity of energy absorbed by electron in excess of this amount is converted to kinetic energy according to the conservation of energy . The atom is said to have undergone the process of ionization .

1 - The study of atomic structure and the interaction between atoms is called ----- physics .

- A -electrons B - nucleus C - Atomic

2 - -----physics studies nuclear reactions and special properties of atomic nucleus .

- A - weapons B - nuclear C - kinetic

3 - -----consists of one single nucleus surrounded by one or more bound electrons .

- A - Atom B - nucleus C - electrons

4 - Any quantity of energy absorbed by electron in excess of this amount is converted to kinetic energy is -----.

- A - kinetic B - excess C - ionization

5 - The field of physics that studies atoms is called-- --physics .

- A - atomic B - physics C - studies

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القسم الثاني

3 - Read the following text then choose the correct A, B, or C:

(25)

Dynamics is distinguished from kinematics, which describes motion, without regard to its causes, in terms of position, velocity, and acceleration, and kinetics, which is concerned with the effect of forces and torques on the motion of bodies having mass. The foundations of dynamics were laid at the end of 16th century by Galileo, who, by experimenting with a smooth ball rolling down an inclined plane, derived the law of motion for falling bodies, he was also the first to recognize that force is the cause of changes in the velocity of a body a fact formulated by Isaac Newton in 17th century in his second law of motion. This law states that the force acting on a body is equal to the rate of change of the body's momentum.

1 - ----- describes motion, without regard to its causes.

A - kinematics B - Dynamics C - motion

2 - ----- is concerned with the effect of forces and torques on the motion of bodies having mass.

A - velocity B - Dynamics C - position

3 - The foundations of dynamics were laid at the end of 16th century by -----.

A - Newton B - Galileo C - momentum

4 - Newton laid his second law of motion in ----- century.

A - 15th B - 16th C - 17th

5 - The law of ----- states that the force acting on a body is equal to the rate of change of the body's momentum.

A - Newton B - Galileo C - Dynamics

3 - Choose the correct answer A, B, or C.

1 - In the law ($L = m_e v r$), r refers to -----.

A - velocity of the electron

B - Mass of electron

(25)

C - Radius of the orbit

2 - ----- (${}^2\text{H}$) contains one neutron and one proton in its nucleus.

A - Isotope B - Deuterium C - Resonance

3 - ----- (${}^3\text{H}$) contains two neutrons and one proton in its nucleus and is not stable.

A - Deuterium B - Particle C - Tritium

4 - ----- form notional shells around the nucleus.

A - Atom B - Electrons C - Photons

5 - ----- electromagnetic radiation that can be detected by the human eye.

A - Molecule B - Quantum C - Light

4 - Read the sentences and choose the correct order:

2 A - is a revolutionary theory describing the structure of the hydrogen atom.

1 B - The Bohr model, proposed by Niels Bohr in 1913

4 C - combining classical and quantum physics.

3 D - It introduced the idea of quantized orbits for electrons,

1 - BADC

2 - DCBA

3 - ADCB

(25)

The End

Written by: M. Linda Ahmad

1 First Question: 25

- 1 - Atomic C 5
- 2 - nuclear B 5
- 3 - Atom A 5
- 4 - ~~kinetic~~ ^{ionization} C 5
- 5 - Atomic A 5

4 Fourth Question

The correct answer is

1-BADC

25

2 Second Question: 25

- 1 - Dynamics B 5
- 2 - Dynamics B 5
- 3 - Galileo B 5
- 4 - 17th C 5
- 5 - A

5 - ^{تفاضل على مائة سؤال}

12th year's exam
2024-2025

3 Third Question: 25

- 1 - C 5 Radius of the orbit
- 2 - B 5 Deuterium
- 3 - C 5 Tritium
- 4 - B 5 Electrons
- 5 - C 5 Light

~~Ans~~

الاسم:

جامعة طرطوس

كلية العلوم -- قسم الفيزياء

أسئلة مقرر تخصصية 2 للسنة الثانية

1= Translate these two paragraphs into English :

- 1- يخبرنا تواتر الموجة عن عدد الدورات في كمية من الوقت . يتم التعبير عن التواتر بالهرتز . الهرتز الواحد يساوي دورة واحدة في الثانية . أما دور الموجة فهو الزمن المطلوب لدورة واحدة . الدور و التواتر مرتبطين , التواتر = $1/\text{الدور}$.
- 2- تشكل حركة الماء بين الغلاف الجوي و الأرض و المحيط و حتى الأشياء الحية دورة الماء . المطر , الثلج , البرد يسقط على المحيطات و الأرض بسبب الجاذبية . سوف يتجمع الماء في أماكن محددة إذا كانت الأرض مسطحة مشكلاً برك و بحيرات و مستنقعات . بعض الماء سوف يتسرب عبر الأرض و يتجمع تحت الأرض كمياه جوفية .

2 – Translate these two paragraphs into Arabic :

1 – The deflecting of moving **objects** from the straight path due to the Earth's rotation is called the **CORIOLIS** effect . Earth is **spherical** , Earth's circumference at latitudes above and below the equator is shorter than the circumferences at the equator . But the period of rotation is **always** 24 hours , therefore , points on earth near the equator travel faster than the points **closer** the poles . The differences in speed of rotation causes the **CORIOLIS** effect .

2 - Pitch : is how **high or low** you think a sound is . Pitch depends on the frequency and wavelength of a **sound wave** .

A loudness of a **sound** is a measure of how well a sound can be heard . One way to increase loudness is with an amplifier . The unit used to express loudness is the decibel .

3 – Complete each space with the appropriate term :

Loudness - decibel - medium – satellites – channel - adhesion

1 – A ----- is the path that a stream follows .

2 – A ----- can measure vibrations in the height of the ocean's surface .

3 – A----- is the material through which a wave travels .

4 – The unit used to express loudness is the ----- .

5 – The property that holds molecule of different substances together is -----.

6 – A ----- of the sound is a measure of how well a sound can be heard .

4 – Choose the appropriate term :

1 – The property that holds molecule together is (cohesion – adhesion) .

2 – When solid water changes directly to water vapor without first becoming a liquid . It is called (evaporation - sublimation) .

3 – The points where the wave is lowest is called (troughs – crests) .

4 – A (gradient – stream load) is the measure of the change of elevation over a certain distance .

5 – The (erosion – steepness) of land affects how fast water flows over the watershed .

6 – Write the missing word in the space :

1 – A ----- is an area of land that is drained by the river system .

2 – The measure of the mass of a substances divided by its volume is ----- .

3 – Plants release water into the atmosphere through stomata . This state is called ----- .

4 – The disturbance that transfers energy from one place to another is called a -----.

----- The End -----

المعلم حسن قزاملية (21)
السنة الثانية

السؤال الأول: (20)

1] The frequency of a wave tells us how many cycles occur in an amount of time. Frequency is expressed in hertz (HZ). One hertz is equal to one cycle per second. The wave period: It is the time required for one cycle. Frequency and period are related, frequency is the inverse of period. $Frequency = \frac{1}{Period}$

2] Movement of water between the atmosphere, land, Ocean, and even living things makes up the water cycle. Rain, snow, and hail fall on the oceans and land because of gravity. On land, water flows in streams, rivers, and waterfalls. If the land is flat, water will collect in certain areas forming ponds, lakes, and marshlands. Some water will soak through the ground and collect underground as groundwater.

السؤال الثاني: (20)

1] انحراف الاضواء المنعكسة على طرفها المبتر بسبب دوران الارض يدعى تأثير كوريوليس. الارض كروية، محيط الارض عند دوائر العرض اعلى وادنى قطب الاستواراً مقرون محيط الارض عند قطب الاستوار. لكن سرعة الدوران دائماً 24 ساعة، لذلك النقاط على الارض بجانب قطب الاستوار تتحرك أسرع من النقاط الاقرب من القطبين. الانحرافات على سرعة الدوران تسبب تأثير كوريوليس.

2] نغمة الصوت هو مدى ارتفاع أو انخفاض الصوت. تقم نغمة الصوت بتحديد التواتر وطول الموجه الصوتية. هواء (قوة) الصوت تقيدهم شمع الصوت بكل حد. طريفة واحدة كرفق مفره الصوت باستخدام مكبر الصوت. الموجه الموحدة للغير من مفره الصوت هي الديسيبل (db)

- (3)
- 1- Channel 4
 - 2- Satellites 4
 - 3- medium 4
 - 4- decibel 4
 - 5- adhesion 4
 - 6- Loudness 4

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- (4)
- 1- Cohesion 4
 - 2- sublimation 4
 - 3- troughs 4
 - 4- gradient 4
 - 5- steepness 4

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- (5)
- 1- watershed 4
 - 2- density 4
 - 3- transpiration 4
 - 4- wave. 4

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جامعة طرطوس

كلية العلوم

قسم الفيزياء

I - Translate into Arabic:

1 - Echo is a reflected sound wave . The use of reflected sound waves to find objects in their path is called echolocation .

Echoes are used in medicine to detect and make images of organs such as the heart and bladder and to check how a fetus is growing .

2 – Resonance happens when sound wave matches the natural frequency of an object and causes to vibrate .

It is important for making music in wind instruments . It can occur in buildings , towers , and bridges .

II - Translate into English:

1- يمتلك جزئ الماء ذرتي هيدروجين ذات شحنة موجبة صغيرة و ذرة أوكسجين ذات شحنة سالبة صغيرة لذلك جزئ الماء جزئ قطبي .

2- تبطئ النباتات الجريان السطحي للماء و تقلل التعرية . تحدد مسامية و نفوذية الصخر و الرواسب مقدار الماء الذي بإمكانه التسرب داخل الأرض

III - Complete each space with the appropriate term:

Channel - current - adhesion - cohesion –coriolis - tributary

- 1- The property that holds molecule together is -----.
- 2- The property that holds molecules of different substance together is ----
-----.
- 3- A ----- is a smaller stream that feeds into the river system .
- 4- A -----is the path that the stream follows .
- 5- The oceans contain streamlike movement of water called ocean -----.

6- The deflection of moving objects from the straight path due to earth 's rotation is called the ----- effect .

III - Choose the appropriate scientific term:

1- (Sublimation – Evaporation) occurs when liquid water changes into water vapor .

2- (Condensation – Precipitation) is the change of state from a gas to a liquid .

3 – The chemical characteristic of ocean water include (salinity – density) .

4 – The point where the wave is highest are called (troughs – crests) .

7- The measure of the mass of a substances divided by its volume is (density – salinity) .

IV - Write the missing word in the space:

1- A ----- is a disturbance that transfers energy from one place to another .

2- A ----- is high or low you think the sound is .

3- A liquid that dissolves substances is called a ----- .

4- When solid water changes directly to water vapor without first becoming a liquid . It is called ----- .

5- Frequency is the inverse of ----- .

6- A ----- is the material through which a wave travels .

===== The End =====

Prof. Linda M. Ahmad

الدورة الثانية ٢٠٢٢ / ٢٠٢٤

سلم تصحيح مادة اللغة الإنكليزية التخصصية للسنة الثانية قسم الفيزياء

السؤال الأول : $2 \times 15 = 30$

- 1 - الصدى موجة صوتية منعكسة . يدعى استخدام الأمواج الصوتية لإيجاد الأشياء في طريقها تحديد الموقع بالصدى . يستخدم الصدى في الطب لكشف و أخذ صور للأعضاء مثل القلب و المثانة و لمراقبة كيفية نمو الجنين .
- 2 - يحدث الرنين عندما تلائم الموجة الصوتية التردد الطبيعي لشيء ما و تسبب اهتزازه . يعد الرنين مهماً لصنع الموسيقى في الآلات النفخية . يمكن أن يحدث الرنين في الأبنية ، الأبراج ، و الجسور .

السؤال الثاني : $30 = 2 \times 15$

- 1- The water molecule has two hydrogen atoms with a small positive charge and one oxygen atom with a small negative charge . The water molecule therefore is a polar molecule .
- 2- Plants slow water runoff and reduce erosion . The porosity and permeability of rock and sediment determine how much water can seep down into the ground .

السؤال الثالث $12 = 6 \times 2$

- 1 - cohesion
- 2 - adhesion
- 3 - tributary
- 4 - channel
- 5 - current
- 6 - coriolis

السؤال الرابع $10 = 5 \times 2$

- 1 - Evaporation
- 2 - Condensation
- 3 - salinity
- 4 - crests
- 5 - density

السؤال الخامس $18 = 6 \times 3$

- 1 - wave
- 2 - pitch
- 3 - solvent
- 4 - sublimation
- 5 - period
- 6 - medium

-----The End-----

مدرسة: لينا أحمد