

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 و اجاب محلولة

# اللغة التخصصية ١

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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

تخصیص (1) شمس فیزیاء  
فضل شمس ۰۰۹/۰۰۵

جامعة طرطوس

كلية العلوم

قسم الفیزياء

I - Translate into Arabic:  $15 \times 2 = 30$

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:  $15 \times 2 = 30$

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

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

III - Complete each space with the appropriate term:  $2 \times 6 = 12$

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 -----.

→  
بالتوقيع

- 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:**  $2 \times 5 = 10$

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

**IV- Write the missing word in the space:**  $3 \times 6 = 18$

- 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



## الم قصير كلفه (1)

1 Translate into Arabic.

15 x 2

1- الصوت صوته صوته. احتكاك الأصوات الصوتية المنطقية.  
لا يحدد اختيار في ما إذا كان (محدد الموقع بالصوت).  
يستخدم الصوت في الطب لتحديد وضع صور الأعصاب مثل القلب والمثانة  
ولمراقبة نمو الجنين.

2- يحدث الرنين عندما تنطابق الموجة الصوتية مع التردد الطبيعي للأنسجة  
وتسبب اهتزازها.

يستخدم الرنين في تشخيص الأمراض في الآلات النطقية. يمكن أن  
يحدث الرنين في الأنف والاذن والحنجرة.

2 Translate into English:

15 x 2

1- A water molecule is made up of two hydrogen atoms  
~~and one~~ with a small positive charge, and  
one Oxygen atom with a small negative charge,  
~~So~~ A water molecule ~~is~~ therefore is a Polar  
molecule.

2- Plants slow runoff and reduce erosion. The Porosity and  
permeability of rock and sediment determine  
how much water can seep down into the ground

3 Complete each space with the appropriate term:

2 x 6

- 1- Cohesion
- 2- adhesion
- 3- A tributary
- 4- channel
- 5- current
- 6- Coriolis

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4) Choose the appropriate scientific term:  $2 \times 5$

1 - Evaporation

2 - Condensation.

3 - Salinity

4 - crests

5 - density

$\frac{10}{10}$

5) Write the missing word in the space:

1 - wave

2 - Pitch

3 - solvent

4 - Sublimation.

5 - Period

6 - medium

$3 \times 6$

$\frac{18}{18}$

11/ *Alto*

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 -----



المصير في الحياة (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.  $\text{Frequency} = \frac{1}{\text{Period}}$

[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 الاقطاب المتحركة على مدارها المميز بسبب دوران الارض يدعى تأثير كوريوليس. الارض كروية، محيط الارض عند دوائر العرض اعلى وأدنى قط الاستوار مقرون محيط الارض عند قط الاستوار. لكن سرعة الدوران دائماً 24 ساعة، لذلك النقاط على الارض بجانب قط الاستوار تتحرك أسرع من النقاط الأترب من القطبين. الاختلافات في سرعة الدوران تسبب تأثير كوريوليس.

[2] نغمة الصوت هو مدى ارتفاع أو انخفاض الصوت. نغمة نغمة الصوت تتحدد على التواتر وطول الموجة الصوتية. موجة (نغمة) الصوت تقيس لم يسمع الصوت بشكل جيد. طريقة واحدة لرفع قوة الصوت باستخدام مكبر الصوت. الموجة الصغيرة المستعدة للغير من قوة الصوت هي الديسيبل (db)



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

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

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

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الاسم:

جامعة طرطوس  
كلية العلوم – قسم الفيزياء

أسئلة لغة تخصصية 1 للسنة الثانية

1= Translate these two paragraphs into English :

- 1 -تفقد الطاقة بسبب الانتشار حيث تنتشر الأمواج في أكثر من اتجاه واحد . و كلما انتقلت واجهه الموجه أبعد من المصدر انتشرت الطاقة في منطقة أكبر . إذا كنت تقيس الموجه في نقطة أبعد من المصدر فأنت تقيس طاقة أقل لكن الطاقة الكلية لواجهه الموجه تبقى ذاتها.
- 2 – القارات تشبه جزر ضخمة محاطة بمحيط عالمي مترابط شاسع . معظم ثلاثة أرباع الأرض مغطاة بماء المحيط . يقسم المحيط العالمي للأرض إلى خمس محيطات رئيسية . الأكبر هو المحيط الهادي الذي يتضمن نصف ماء الأرض . المحيط الأطلسي هو التالي في القياس و يمتد باتجاه شمال – جنوب . يوجد المحيط الهندي في نصف الكرة الأرضية الجنوبي . و يتوضع المحيط المتجمد الجنوبي بجانب القارة القطبية الجنوبية و هو مغطى بالجليد معظم السنة .

2 = Translate these two paragraph into Arabic :

1 – Surface currents are affected by three factors : continental deflections , the *coriolis* effects , and the global winds . These factors keep surface currents flowing in distinct patterns around earth . The deflection of moving objects from the straight path due the earth's rotation is called the coriolis effect .

2 -- Sonar stands for sound navigation and ranging . This technology uses sound waves to measure distances . Scientists use sonar determine ocean's depth by sending sound pulses from the ship down into the ocean . The sound moves through the water , bounces off the ocean floor , and returns to the ship , where the sound waves are picked up by receivers . Computers on the ship calculate the time the sound takes to travel from the ship and return back again .

3 = Choose the correct term between brackets :

- 1 – A ( pitch -- loudness ) is how high or low you think a sound is .
  - 2 – The points where the wave is lowest is called ( crests – troughs ) .
  - 3 – Particles move perpendicularly to the direction the wave travels in a ( transverse – longitudinal ) wave .
  - 4 – Energy loss due to a ( medium – wavelength ) .
  - 5 – An ( unit – amplitude ) is a measure of how far the particles in the medium move away from their rest position.
- 

4 = Complete each space with the appropriate term :

Adhesion – cohesion – tributary – channel – decebil

- 1 – The unit used to express loudness is the -----.
  - 2 – The property that holds molecule together is -----.
  - 3- The property that holds molecule together is -----.
  - 4 – A-----is the path that the stream follows .
  - 5 – A-----is a smaller stream that feeds into the river system .
- 

5 = Write the missing words in the space :

- 1 – The disturbance that transfers energy from one place to another is called a -----.
  - 2 – Plants release water into the atmosphere through stomata . This state is called -----.
  - 3 – The ocean contains streamlike movement of water called ocean -- -----.
  - 4 – A -----is high low and high you think the sound is .
  - 5 – A ----- is an area of land that is drained by the river system.
- 

# The End #



Q1: [30] 15x2

1- Translate these two paragraphs into English:

1- Energy loss due to spreading: Waves usually spread out in more than one dimension. As each wavefront moves farther from the source, the energy is spread over a greater area. If you measure a wave at a point farther from the source, you measure less energy. But the total energy of the wavefront stays the same.

2- The continents are like huge islands surrounded by one vast, interconnected global Ocean. Almost three fourths of earth is covered by ocean water. Earth's global Ocean is divided into five main oceans. The largest is the Pacific Ocean. It contains about half of earth's water. The Atlantic Ocean is next in size. It stretches in a north-south direction. The third-largest Ocean, the Indian Ocean, is found in the southern Hemisphere. The Southern Ocean is located near Antarctica. The smallest Ocean, the Arctic Ocean, is nearly covered by ice much of the year.

2- Translate these two paragraphs into Arabic:

تأثير التيارات السطحية بثلاثة عوامل: الانحرافات القارية، تأثير كوريوليس، والرياح الأرضية. تحافظ هذه العوامل على تدفق المياه السطحية في نماذج دائرية حول الأرض. انحراف الموارد المتحركة عن طريق المسقيم بين دوران الأرض يُدعى تأثير كوريوليس.

Q2: [30] 15x2

2- حدد (يعني) يرمز / الوتر إلى العلاقة الصوتية وتحديد المدى. يستخدم هذه النقيطة الأصوات لقياس المسافات. يستخدم العلماء الوتر ليجد محور المحيط بالمرساة نبضات صوتية من النقيطة باتجاه الأسفل إلى دافن المحيط. تنقل الأصوات عبر الماء ، تردد عن آخر من المحيط ويعود إلى النقيطة حيث تنقل الأصوات الصوتية بواسطة المقبلات ، قرب المطاوعة على النقيطة الزمن الذي يستغرقه الصوت لينقل من النقيطة إلى آخر من المحيط ويعود مجدداً .

- 3 choose the correct term :  $\phi 3: [15] 5 \times 3$
- |           |              |               |
|-----------|--------------|---------------|
| 1- Pitch  | 2- troughs   | 3- transverse |
| 4- medium | 5- amplitude |               |

- 4 complete each space with the appropriate term:  $\phi 4: [10] 2.5 \times 4$
- |            |               |      |
|------------|---------------|------|
| 1- decibel | 2- cohesion   | 3- x |
| 4- channel | 5- tributary. |      |

- 5 1- wave  $\phi 4: [15] 5 \times 3$
- |                  |
|------------------|
| 2- Transpiration |
| 3- currents      |
| 4- Pitch         |
| 5- watershed     |

**I. Answer the following questions :**

**[ 45 marks]**

1. Define Physics ?
2. What is Newton's first law ?
3. What are the four laws of Electromagnetism?

**II. Choose the correct answer:**

**[ 35 marks]**

4. Newton's ..... law is often called the law of inertia.

- a. first                      b. second                      c. third

5.....optics is the study of light as rays.

- a. Geometrical                      b. Physical                      c. Electrical

6. ....studies the behaviour and properties of light.

- a. Physics                      b. Electromagnetism                      c. Optics

7. Walking is an example of Newton's.....law.

- a. first                      b. second                      c. third

8. A rainbow is an example of .....optics.

- a. Geometrical                      b. Physical                      c. Electrical

9. For every action there is an equal and opposite .....

- a. motion                      b. refraction                      c. reaction

10. .... deals with the electromagnetic force.

- a. Electricity                      b. Magnetism                      c. Electromagnetism

**III. Make the following sentences as required :**

**[ 20 marks ]**

11. Bell invented the telephone. (passive voice ).

12.The physicists study matter. (passive voice ).

13. Emma: I am working hard. ( Reported speech ).

14. Sam: I live in the city center. ( Reported speech ).

**GOOD LUCK**

Examiner

**Alaa Ahmad**

Dean

**Dr. Hassan Suleiman**



**I. Answer the following questions :**

**[ 45 marks, 15 m. each one]**

1. Physics : is the scientific study of physical phenomena like the motion of matter ,  
energy and force
2. Newton's first law : A body in rest or in motion will remain in its position unless acted  
upon by a force
3. The four laws of Electromagnetism:
  1. Faraday's law of induction
  2. Ampere's circuital law
  3. Lenz' law
  4. Lorentz' force

**II. Choose the correct answer:**

**[ 35 marks, 5.m. each one]**

4. a. first.
5. a. Geometrical.
6. c. Optics
7. c. third
8. b. Physical
9. c. reaction
10. c. Electromagnetism

**III. Make the following sentences as required :**

**[ 20 marks, 5.m. each one]**

11. The telephone was invented by Bell.
12. Matter is studied by the physicists.
13. Emma said that she was working hard.
14. Sam said that he lived in the city center.

GOOD LUCK

Examiner

**Alaa Ahmad**

**I. Answer the following questions: [30 marks]**

1. What is Newton's third law ?
2. What are the four laws of Electromagnetism?
3. In moment of inertia of flywheel experiment, what is the flywheel ?

**II. Choose the correct answer : [50 marks]**

4. Newton's first law is often called the law of.....  
a. action-reaction      b. real motion      c. inertia
5. .... happens when a force acts on a mass in Newton's second law.  
a. Acceleration      b. Direction      c. oscillation
6. Optics studies the behavior and properties of .....  
a. electricity      b. light      c. force
7. There are three forms of electromagnetism : light, electricity and.....  
a. motion      b. magnetism      c. force
8. A rainbow is an example of .....optics.  
a. physical      b. geometrical      c. electrical
9. Geometrical optics is the study of light as .....  
a. rays      b. waves      c. particles
10. For every action there is an equal and opposite.....  
a. motion      b. refraction      c. reaction
11. To determine acceleration due to gravity is the object of .....experiment.  
a. prism      b. flywheel      c. barpendulum
12. In Newton's ring experiment, few coloured fringes will be observed near the centre when we use ..... light.  
a. monochromatic      b. sodium      c. white

13..... happens when a white light passes through prism, and it splits up into its constituents of seven colours.

- a. Dispersion of light      b. Optics      c. Spectrum

**III. Make the following sentences as required :[20 marks]**

14. Newton formulated the laws of motion. (passive voice).  
15. physicists are studying plasma . ( passive voice).  
16. Majd : I went to my collage yesterday. (reported speech).  
17. Anna : I am planning to do it today.( reported speech).

*GOOD LUCK*

*Examiner*

**ALAA AHMAD**

*Dean*

**Dr. HASSAN SULEIMAN**



**I. Answer the following questions: [30 marks] 10 m. each one**

1. Newton's third law : when two objects interact ,they apply forces to each other of equal magnitude and opposite direction.
2. The four laws of Electromagnetism are :
  1. Faraday's law of induction.
  2. Ampere's circuital law
  3. Lenz' law
  4. Lorentz' force.
3. The flywheel: is a heavy wheel having a long axle being fixed on rigid frame with the help of two bearings.

**II. Choose the correct answer : [50 marks] 5 m. each one**

4. C . inertia
5. a. Acceleration
6. b. light
7. b. magnetism
8. a. physical
9. a. rays
10. C. reaction
11. C. barpendulum
12. C. white
13. C. Spectrum

**III. Make the following sentences as required : [20 marks] 5 m. each one**

14. The laws of motion were formulated by Newton.
15. plasma is being studied by physicists .
16. Majd said that he had gone to his collage the day before.
17. Anna said that she was planning to do it that day.

Examiner

ALAA AHMAD