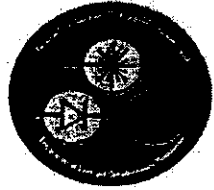




University of Technology
Department of Laser & Optoelectronics Engineering
Final Examination 2011-2012



Subject: English language
Division: Laser & Optoelectronics Engineering
Examiner: Lecturer Shams Basil Ali

Class: 1st year
Time: 3 hours
Date: 31/5/2012

Attempt five questions only

Q1/ Translate the following passage to the Arabic language.

(20 mark)

Lasers work as a result of resonant effects. The output of a laser is a coherent electromagnetic field. In a coherent beam of electromagnetic energy, all the waves have the same frequency and phase. The acronym laser stands for "light amplification by stimulated emission of radiation." Lasers work as a result of resonant effects. The output of a laser is a coherent electromagnetic field. In a coherent beam of electromagnetic energy, all the waves have the same frequency and phase. In a basic laser, a chamber called a cavity is designed to internally reflect infrared (IR), visible-light, or ultraviolet (UV) waves so they reinforce each other. The cavity can contain gases, liquids, or solids. The choice of cavity material determines the wavelength of the output. At each end of the cavity, there is a mirror. One mirror is totally reflective, allowing none of the energy to pass through; the other mirror is partially reflective, allowing approximately 5 percent of the energy to pass through. Energy is introduced into the cavity from an external source; this is called pumping.

Q2. Complete the sentences: (choose five only)

(20mark)

1. X-rays are
2. Mirrors are used in scientific apparatus such as
3. The relation betweenand is given by: $360^0 = 2\pi$ Radians
4. The areas of medical laser surgery include :and.....
5. Snell-Descartes law, is a formula
6. Military Applicationsand.....
7. Possible wavelength specific reaction of specific colors of

Q3/Choose the correct modifier. (Choose ten only)

(20 mark)

Example: She danced (graceful, gracefully) across the stage.()

Answer: She danced (graceful, gracefully) across the stage. (adverb)

1. Leah behaves (good, well).
2. Sheila feels (sad, sadly) about the death of her dog.
3. I am not (really, real) sure if I will have a party.
4. The directions were (simple, simply) to follow.
5. I don't feel (good, well).

إحلب الصفحة رجاءاً →

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mes

6. The repairs went (slowly, slow).
7. The change in speed was (gradually, gradual).
8. You work too (serious, seriously) sometimes.
9. We feel (awful, awfully) about what happened.
10. These chocolates taste (good, well).
11. Firefighters must respond very (quick, quickly).
12. Lynn spoke in a (calm, calmly) voice after the accident.
13. Tiger Woods putted (bad, badly) on that last hole!
14. The lights shone (brightly, bright) in my eyes.
15. Paul did (good, well) on his second driver's test.

Q4. Write true or false to the following sentences:

(20 mark)

1. Dogs make good pets for young children.
2. The pioneers settle quickly on the small farms around Gloucester.
3. Your ancestors lived beside the sea; her lived near Moncton.
4. Do he often go to the beach during the summer?
5. Those big, chunky pots sell for nine dollars, so you can buy several of them
6. I do not think about their problems now because I don't have time.
7. Casually, the thieves surveyed the neighborhood until they spotted the right House.
8. Everyone recognized his courage and strength even if he don't.
9. Lilacs always smell wonderful to spring.
10. Mark smelled the skunk and left the area immediate.

Q5/ A. Connect between the terms as suitable:

(20 mark)

Adjectives	Prepositions	Interjections
Slow	Cross eyes	Before
Out	Of	Word

B. The Advantages of Laser Surgery?(give five only)

Q6: Complete the following sentences by choosing the correct pronoun.

(20 mark)

1. Does anybody know (his or her, their) Social Insurance Number?
2. Each of those buyers should consult (his, her, his or her, their) supervisors.
3. Max and Helen sang at (her, his, their) mutual friends' wedding.
4. None of the boys has paid for (his, their) own bus ticket.
5. Several of the men have paid (his, her, his or her, their) dues.
6. No one should submit (his or her, their) report later than tomorrow.
7. The deer hurt (her, his, its) leg when it jumped the fence.
8. A few forgot (his, her, his or her, their) lunches.
9. Many hens have escaped from (her, their) pen.
10. A few of us have received (his, her, her or his, their, our) marks.

القلب (الصفحة ٢٣٥) →

قسم هندسة الليزر و الالكترونيات البصرية

فرع هندسة الليزر

المدرس : م. شمس باسل علي

المادة : اللغة الانكليزية

الاجوبة النموذجية

Q1/ Translate the following passage to the Arabic language.

يعمل الليزر نتيجة تأثير الرنين و الناتج هو مجال كهرومغناطيسي متشاكه و لكل الموجات لها نفس التردد و الطور ، ومصطلح الليزر تم اشتقاقه من العبارة (تضخيم الضوء بواسطة الانبعاث المحفز للاشعاع) تتكون منظومة الليزر من حجرة او ما تعرف بالتجويف تعمل على انعكاس الاشعة داخلها قد تكون الاشعة (تحت الحمراء ، فوق البنفسجية و الضوء المرئي) ليقوي احدهما الاخر و يتم اختيار مادة التجويف حسب نوع الطول الموجي الناتج و في نهاية طرفي التجويف توجد مرآة احدهما ذات انعكاس كلي و لاخرى تسمح بمرور الطاقة من خلالها بمقدار 5%، و يتم اعطاء طاقة للتجويف من خلال عملية تدعى الضخ.

Q2. Complete the sentences: (choose five only)

1. X-rays are electromagnetic radiation of wavelength typically in the range 10 pm - 1 nm. X-ray photons have high energies
2. telescopes , lasers and cameras
3. radians and degrees
4. الجواب لثلاث فقط. Eye Treatment. General Surgery. Ear, Nose and Throat. Dentistry. • Dermatology. • Gastroenterology and colo-rectal. Plastic surgery. Gynecology. Urology. Oncology. Orthopedics. Neurosurgery. Veterinary. Cardiovascular.
5. Snell–Descartes law, is a formula used to describe the relationship between the angles of incidence and refraction
- 6. Military Applications Laser range-finder.designation. Laser.Laser blinding for man and sensitive equipment
7. biological tissue

Q3/ Choose the correct modifier. Indicate the type of modifier (choose ten only)

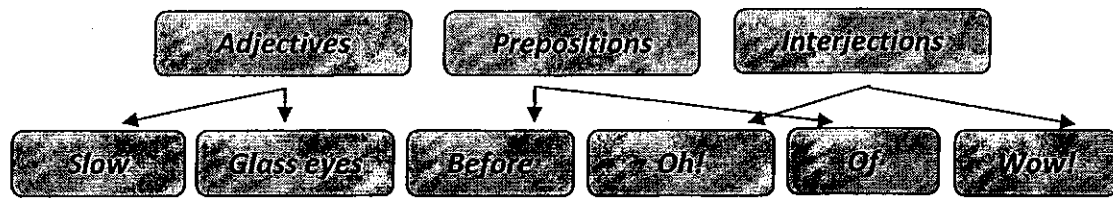
1. Well 2. Sad. 3. Really. 4. Simple. 5. Well. 6. Slowly. 7. Gradual. 8. Seriously
9. Awful. 10. Good. 11. Quickly. 12. Calm. 13. Badly. 14. Brightly. 15. Well.

Q4/Write true or false to the following sentences:

(1-2-5-6-7) true

(3-4-8-9-10) False

5/ A. Connect between the terms as suitable:



B. The Advantages of Laser Surgery?

1. Dry field of surgery, because laser energy seals **الاختام** small blood vessels.
2. Less postoperative pain, because of the sealing **الختم** of nerve ends.
3. No contact with mechanical instruments, so sterilization is built in.
4. Clear field of view, because no mechanical instrument blocks it.
5. Possible wavelength specific reaction of specific colors of biological tissue.
6. Possibility to perform microsurgery under a microscope. The laser beam passes through the same microscope.
7. Possibility to perform surgical procedures inside the body without opening it, using optical fibers to transmit the laser beam.
8. The laser can be used as a precise cutting tool.
9. It can be controlled by a computer, and operate with a very small area of effect under a microscope.

Q6: Complete the following sentences by choosing the correct pronoun.

1. **his or her** Social Insurance Number?
2. Each of those buyers should consult **his or her** supervisors.
3. Max and Helen sang at **their** mutual friends' wedding.
4. None of the boys has paid for **his** bus ticket.
5. Several of the men have paid **their** dues.
6. No one should submit **his or her** report later than tomorrow.
7. The deer hurt **its** leg when it jumped the fence.
8. A few forgot **their** lunches.
9. Many hens have escaped from **their** pen.
10. A few of us have received **our** marks.