

SESSION 2005

**BREVET DE TECHNICIEN SUPERIEUR**

**Opticien - lunetier  
Génie Optique**

**Groupe 10**

**EPREUVE DE LANGUE VIVANTE ETRANGERE**

**ANGLAIS**

**Durée : 2h00**

**Coefficient : 2 : Génie Optique**

**Coefficient : 1 : Opticien - Lunetier**

**L'utilisation du dictionnaire bilingue est autorisé**

**L'usage de la calculatrice est interdit**

Dès que le sujet vous est remis, assurez-vous qu'il soit complet.

Le sujet comporte 2 pages, numérotées de 1/2 à 2/2.

Code sujet : **LVE3**

SESSION 2005	1/2
Examen . BREVET DE TECHNICIEN SUPERIEUR Group. 10	Durée : 2h00
Spécialité :- OPTICIEN LUNETIER Coef 1	
- GENIE OPTIQUE Coef 2	
Epreuve : ANGLAIS	

## HOW TATTOO REMOVAL WORKS

... One busy physician who specializes in tattoo removal... estimates that in the United States alone about 50 per cent of those who get tattoos later regret them. For years, these people had little recourse, and existing removal techniques were invasive (requiring surgery) and painful. But that's changing...

Let's quickly remind ourselves what a tattoo is: a tattoo is a permanent mark or design made on the body when pigment is inserted into the dermal layer of the skin through ruptures in the skin's top layer.

Modern day tattoos are applied by using an electric tattoo machine with needles that rapidly puncture the skin with an up and down motion not unlike that of a sewing machine...

Most dermatologic surgeons caution that complete tattoo removal is not possible. Tattoos are meant to be permanent, so removing them is difficult ...

Before lasers became popular for tattoo removal starting in the late 1980s, removal involved the use of one or more of these often painful, often scar-inducing surgeries:

- Dermabrasion , where skin is "sanded" to remove the surface and middle layers;
- Cryosurgery, where the area is frozen prior to its removal;
- Excision , where the dermatologic surgeon removes the tattoo with a scalpel and closes the wound with stitches (in some cases involving large tattoos, a skin graft from another part of the body may be necessary).

Although the procedures above are still used in certain cases today, lasers have become the standard treatment for tattoo removal because they offer a bloodless, low risk, effective alternative with minimal side effects. Each procedure is done on an outpatient basis in a single or series of visits. Patients may or may not require topical or local anesthesia.

As early as the 1960s, lasers had been developed for industrial uses. When researchers developed lasers that emitted wavelengths of light in short flashes called pulses, medical use became viable. These lasers can effectively remove tattoos with a low risk of scarring...

Lasers work by producing short pulses of intense light that pass harmlessly through the top layers of the skin to be selectively absorbed by the tattoo pigment. This laser energy causes the tattoo pigment to fragment into smaller particles that are then removed by the body's immune system...If you're wondering if the laser might also remove normal skin pigment, don't worry. The laser selectively targets the pigment of the tattoo without damaging the surrounding skin...

The unfortunate thing about tattoos is that both getting them and having them taken off can be uncomfortable. The impact of the energy from the laser's powerful pulse of light has been described as similar to getting hot specks of bacon grease on your skin or being snapped by a thin rubber band...

Following treatment... your skin might feel slightly sunburned for a couple of days and the treated area may remain red for a few weeks. The site might also form a scab, which should be handled gently. After healing, the site will gradually and continually fade.

Side effects of laser procedures are generally few but may include hyperpigmentation , or an abundance of color in the skin at the treatment site, and hypopigmentation, where the treated area lacks normal skin color. Other possible side effects include infection of the site, lack of complete pigment removal and a 5 per cent chance of permanent scarring.

<b>SESSION 2005</b>	2/2
Examen . BREVET DE TECHNICIEN SUPERIEUR Group. 10	Durée : 2h00
Spécialité :- OPTICIEN LUNETIER    Coef 1	
- GENIE OPTIQUE        Coef 2	
Epreuve : ANGLAIS	

## QUESTIONS

- 1 Résumez le document en français (120 - 150 mots +/- 10%)  
(6 points)
  
- 2 Translate from : 'Let's quickly...'  
                      to : '... sewing machine.'  
(4 points)
  
- 3 Can you give other applications of laser light in different fields ? (150 mots)  
(10 points)