

CONCOURS D'ENTRÉE A L 'EAMAC

EUPREUVE D' ANGLAIS.

ANNEE 2014-2015

TECHNICIENS / TECHNICIEN

SUPREIEURS

**A ) comprehension: read the text then say whether the sentences are true or false.**

**2.5pts**

### **Force**

We can describe a force only by its effects. It cannot be measured directly like a length. A force can start something moving. If we push against a small object it moves. A force can also stop something moving or hinder motion. If we brake a moving car it slows down and will eventually stop. Suspend a heavy mass from a copper wire. The wire extends, showing that a force can stretch a body. Forces may also compress, bend or even break an object.

A force can be one of attraction. The force of attraction exerted by the huge mass of the earth is called gravity. If we pick up a stone, then release it, it falls to the ground because of gravitational force. Gravity is an example of a natural force. Whether a force is naturally or deliberately exerted it cannot exist by itself. Forces must always occur in pairs, never in isolation.

When a force acts on a rigid body it is balanced by an equal reaction force which acts in the opposite direction. If a man stands on a slippery surface and brings a force to bear on a heavy load, the reaction force makes him slide backwards. Similarly if a man fires a rifle, the force which pushes the bullet forwards will be matched by a force which makes the gun push backwards against his shoulder.

**Glendinning Eric H. English in Mechanical**

### **Engineering, P24**

- 1- Length cannot be measured directly.
- 2- A force can slow down a moving object.
- 3- A force cannot cause movement.
- 4- A body can be compressed by a force.

- 5- A heavy mass can exert a force.
- 6- Gravity is a force.
- 7- Deliberately exerted forces can exist alone.
- 8- Natural forces can exist alone.
- 9- Natural force can be measurable directly like length.
- 10-A force may happen in isolation.

ii) **Vocabulary**: explain the following words. **2.5pts**

- 1- Hinder            stop something moving or hinder motion-----
- 2- Extend            the wire extends-----
- 3- isolation            must always occur in pairs, never in isolation -----
- 4- Deliberately            or deliberately exerted it cannot exist by itself-----
- 5- Slippery.            slippery surface and brings a force-----

iii) **find the adjectives deriving from these words.** **1.25pts**

- 1- Length
- 2- Attraction
- 3- Act
- 4- Measure
- 5- Break.

iv) **Translation**:

a) **Translate the following paragraph into French** **2.5pts**

We can describe a force only by its effects. It cannot be measured directly like a length. A force can start something moving. If we push against a small object it moves. A force can also stop something moving or hinder motion. If we brake a moving car it slows down and will eventually stop. Suspend a heavy mass from a copper wire. The wire extends, showing that a force can stretch a body. Forces may also compress, bend or even break an object.

b) **Translate into English.**

**1.25pts**

- 1- Une longueur est différente d'une force, la première est mesurable tandis que la dernière ne l'est pas.
- 2- Que signifie la force d'attraction?
- 3- Les forces se manifestent en paire.
- 4- Une force est soit naturelle ou exercée.
- 5- La balle d'un fusil est propulsée par une force.

**B ) linguistic competence:**

**Choose the correct form to complete the sentences.**

**5pts**

1. I'm not as intelligent as you, \_\_\_\_\_?  
a. are you    b. am I    c. aren't you    d. aren't I
2. He has \_\_\_\_\_ the time and the money to play polo.  
a. either    b. as    c. or    d. both
3. She told the boys \_\_\_\_\_ in her bed  
a. not to sit    b. to not sit    c. to sit not    d. to no sit
4. We must \_\_\_\_\_ the classroom swept  
a. have    b. had    c. has    d. had had
5. She is \_\_\_\_\_ girl I have ever met  
a. the most pretty    b. the more pretty    c. the prettiest    d. prettier
6. Nothing was said \_\_\_\_\_?  
a. wasn't it    b. was there    c. was it    d. wasn't there
7. Not till he got home -----he had forgotten the keys.  
a. he remembered    b. did he remember    c. he remembers    d. he'd remembered.
8. He ..... The channel before he invaded England.  
a. has crossed    b. had crossed    c. crosses    d. crossing.

9. You must look.....the garden while I am absent.  
a. at    b. out    b. after    d. up
10. .... suspicious did he become that he trusted nobody.  
a. so    b. soon    c. ago    d. since
11. What is this cake -----of?  
a. makes    b. making    c. make    d. made
12. Love adds a precious .....to the eyes.  
a. see    b. seeing    c. seen    d. sees
13. I have had a student .....the blackboard.  
a. cleans    b. cleaned    c. to clean    d. clean
- 14- She likes swimming .....
- a. either I do    b. I either    c. either do I    d. I do either.
15. .... he travel to England last week?  
a. had    b. does    c. did    d. has
16. Next time try to put .....sugar in the tea.  
a. a few    b. fewer    c. least    d. less
17. Could you tell me what .....?  
a. its    b. is it    c. it is    d. it do.
18. We have been playing cards..... 10 am .  
a. for    b. ago    c. yet    d. since
- 19 . She begged her husband .....anything dangerous.  
a. not do    b). to not do    c. to do not    d. not to do.
20. She wishes this exam-----very easy.  
a. is    b. was    c. be    d. been.

C) Writing;

5pts

Make a paragraph of twenty lines to show how science is dangerous to mankind.

KEY ANSWERS **FORCE.** ( T/ TS)

A) Comprehension questions.

i) Say whether the sentences are true or false.

1 F 2T 3F 4T 5T 6T 7F 8F 9F 10F.

ii) VOCABULARY.

1- Hinder ; to stop , to interrupt, to slow down.

2- Extend ; to lengthen , to make longer.

3- Isolation ; seclusion, separation.

4- Deliberately ; consciously, resolutely.

5- Slippery ; glassy, skiddy, icy.

iii) adjectives deriving from these words.

- 1- Length            long
- 2- Attraction        attractive
- 3- Act                active, acting
- 4- Measure          measurable
- 5-Break              breakable

iv) Translate.

a) Translate into French.

Nous ne pouvons décrire une force que par ses effets. Elle ne peut être mesurée directement comme une longueur. Une force peut faire mouvoir un objet. Si nous poussons un petit objet il se déplace. Une force peut aussi stopper ou gêner un objet en mouvement. Si nous freinons une voiture en mouvement elle ralentit et s'arrête éventuellement. Suspendons une masse lourde à un fil de cuivre. Le fil s'étend montrant aussi qu'une force peut étirer un corps. Les forces peuvent également compresser, plier ou même briser un objet.

b) Translate into English.

- 1- A length is different from a force; the former is measurable whereas the latter is not measurable.
  - 2- What does a force of attraction mean?
  - 3- Forces occur in pairs.
  - 4- A force is whether natural or exerted.
  - 5- The bullet of a gun is pushed by a force.
- A) Linguistic competence. Choose the correct form.
- 1b 2d 3a 4a 5c 6c 7b 8b 9b 10a 11d 12b 13d 14a 15c 16d 17c 18d  
19a 20b.