Unit 1 Physiology of exercise

Task 1 Speaking

Read the sentences about why sport can be positive and number them in order of importance for you. 1 = most important, 5 = least important. Think about why.

- a) Sport helps develop coordination and balance.
- b) It is very good for health to do exercise.
- c) Sport allows people to learn about competition in a positive way.
- d) Children who are less academic may find they can excel at sports.
- e) Sport gives people an opportunity to work off negative feelings.

Task 2

A) Read the sentences about why sport can be negative. In each sentence there are two spelling errors. Correct each error.

Sport may be beneficil for health but it also results in many people sufferring from injuries.

Competition in sport is very usefull for children who need to learn about life, but if they don't get positive advise it can encourage them to be aggressive.

The amount of money earned by sports stars has gradualy increased and is now far too high, meaning that sport is now a business without sufficient focus on the competition itself.

Exceling at sports requires a lot of practice; if young people spend too much time on this, they may neglect school work and recieve poor grades.

Task 3 Anatomy

a) How many parts of the systems listed below do you know?

Cardiovascular system	Respiratory system
Digestive system	Skeletal-muscular system <i>shoulder blade,</i>
Endocrine system	Integumentary system
Nervous system	Urinary system
Reproductive system	

b) Can you guess the medical terms defined below?

- 1. controls movement, thought, memory and feeling
- 2. two bones that go from the base of the neck to the shoulders
- 3. layer of muscle between the lungs and the stomach to control breathing
- 4. produces insulin, helps digestion
- 5. wide curved set of bones connecting legs and spine
- 6. nerves inside the spine connecting all parts of the body to the brain
- 7. tissue joining a muscle to a bone
- 8. any of the tubes that carry blood from all parts of the body towards the heart

Task 4 Reading Before you read: Match five pairs of synonyms in the first line and four pairs of antonyms in the second one.

1. improve – maintain – enhance – aid – stretch – help – keep – affect - extend - influence

2. increase – lengthen – reduce – stretch – anaerobic - contract – shorten - aerobic

Scan the text below quickly to match paragraphs with suitable headings.

Basic Physiology of Exercise	Aerobic Exercise	Benefits of Exercise
What is exercise?	Anaerobic Exercise	

Heading 1:

1. Exercise is an activity that results in contraction of skeletal muscle. The term is usually used in reference to any activity that improves physical fitness. Although muscle contraction is the common element of all forms of exercise, many other organs and systems are affected, for example, the heart and lungs.

Heading 2:

2. Contraction of skeletal muscles, the muscles under conscious control, is the primary physiological event during exercise. Because skeletal muscles can actively contract, but are not designed to actively lengthen, they are arranged as opposing pairs. As one muscle shortens, another is stretched. An example of such a pair of muscles can be observed in the upper arm, where the biceps and triceps have opposite actions.

Heading 3:

3. This type of exercise involves heavy work by a limited number of muscles, for example during weight lifting. These types of activities are maintained only for short intervals, and the supply of oxygen is insufficient for aerobic metabolism, resulting in a substantial oxygen debt. This exercise increases strength and muscle mass, but is of limited benefit to cardiovascular health.

Heading 4:....

4. This type of exercise uses oxygen to keep large muscle groups moving continuously at an intensity that can be maintained for at least 20 minutes. This form of exercise uses several major muscle groups throughout the body, resulting in greater demands on the cardiovascular and respiratory systems to supply oxygen to the working muscles.

Heading 5:

5. Regular exercise reduces the risk of death due to heart disease and stroke, aids in reducing weight, strengthens bones, and enhances immune function. The psychological benefits are also broad. One area of controversy has been how much exercise is enough to improve general health, reduce the risk of heart disease, and increase longevity. Meaningful studies on this topic are very difficult to perform because they require large populations of subjects and many years of data collection, and because poor health sometimes negatively influences physical activity. Despite these difficulties, it is clear that regular exercise, along with a generally healthy lifestyle, is beneficial.

(adapted from: Seal, B. Academic Encounters. Cambridge University Press, 1997.)

Vocabulary

Study the examples from the text above and decide which of the two options in brackets better describes the word in italics in the given context:

- 1. Although muscle contraction is the *common (shared by many/ ordinary)* element of all forms of exercise, many other organs and systems are affected.
- 2. Contraction of skeletal muscles, the muscles under *conscious (voluntary/involuntary)* control, is the primary physiological event during exercise.
- 3. This type of exercise *involves (causes/ includes)* heavy work by a limited number of muscles, for example during weight lifting.
- 4. The supply of oxygen is *insufficient (enough/not enough)* for aerobic metabolism, resulting in a *substantial (small/great)* oxygen debt.
- 5. This form of exercise uses several major muscle groups throughout the body, resulting in greater demands on the cardiovascular and respiratory systems to *supply (give/ receive)* oxygen to the working muscles.
- 6. It is clear that regular exercise, along with a generally healthy lifestyle, is *beneficial (good for you/ not good for you)*.

Task 5 Grammar: Gerund and Infinitive

Study the sentences below

- ... studies on this topic are very difficult to perform ...
- ... exercise aids in reducing weight...
- ... muscles are not designed to actively lengthen...
 - a) Complete the gaps:
 - 1. The uses of
 - after prepositions, e.g. after, before, in, by, etc.
 - as a noun, e.g. *He likes hosting parties*.

- After certain verbs, e.g. hate, mind, enjoy, etc.
- 2. The uses of
- after adjectives, e.g. ready, pleased, great, etc.
- after certain verbs, e.g. decide, agree, hope, etc.
- to show purpose, e.g. *I'm here*

b) Complete the sentences:

We stopped to take photos We stopped taking photos

c) Complete the gaps with the correct form of the verb in brackets:

1. You need to speak to Mrs. Jones, she is responsible for (deal) with new clients.

- 2. There's no point in (complain) he won't change his mind.
- 3. The book was so interesting that I kept on..... (read).
- 3. The computer was not working so I tried (restart).
- 4. After doing the first exercise I gave up..... (try).
- 5. Unfortunately, we failed (win) the contract.
- 6. Have you considered (look) for another job?
- 7. I look forward to (hear) from you soon.
- 8. He forgot (send) his application.
- 9. The college principal promised (look) into the matter.

d) Complete the sentences with your own ideas, using *-ing* or *to*:

- 1. I hope.....
- 2. I don't mind.....
- 3. I'd love
- 4. I can't afford.....5. You can hardly avoid

e) Use the following expressions in sentences:

- annoying/annoyed
- exciting/excited
- exhausting/exhausted
- embarrassing/ embarrassed
- interesting/interested
- surprising/surprised

tiring/ tired

Task 6 Word class

Consider these sports: *yoga, skateboarding, climbing, swimming*. Do you associate them with younger or older people or both? Why?

Read two comments from a website. What reasons are given to support or oppose the proposal?

Proposal: There should be an age limit for the Olympics.

Yes! I think the Olympics should put a 30-year-old cap on their sports. After 30, the bones become more brittle and the body becomes less flexible. The muscles tear more easily and performance is not as good. The athlete is more likely to break something, or even have a breakdown. They are not as resilient.

NO! I do not believe so! It is true that as we get older it is harder to maintain the same athletic ability as in a person's twenties. But with technology and our knowledge of proper nutrition, athletes are able to compete when they are older. I believe that everyone has a right to accomplish their dream no matter what age that person is! It is important that everyone has a dream.

Do you agree with the proposal? Why/not? Use the phrases below.

Adjective	Verb	Noun
competitive		
		knowledge
	X	athlete
Х	maintain	
	accomplish	
resilient	X	
important	X	

Complete the table with the correct words.

(adapted from Dimond-Bayir, S. (2014). Writing for IELTS. Macmillan.)