


<p>المادة : لغة إنكليزية الشهادة : الثانوية العامة فرعا : العلوم العامة وعلوم الحياة نموذج : رقم (4) المدة : ساعتان ونصف</p>	<p>الهيئة الأكاديمية المشتركة قسم: اللغة الإنكليزية وآدابها</p>	 <p>المركز الشؤبي للبحوث والأهءاء</p>
--	--	--

نمؤء مسابقة (يراعي تعليق الدروس والتوصيف المعدل للعام الدراسي 2016-2017 وحتى صدور المناهج المطورة)

Part One: Reading Comprehension

(Score: 24/40)

Read the selection below about radioactive contamination problem and its protective actions and then answer the questions that follow.

Radioactive Contamination

1 Radioactive contamination is the presence of radioactive substances on surfaces or within solids, liquids or gases or the human body, where their presence is unintended or undesirable. Radioactive contamination can arise from accidents involving nuclear reactors, industrial sources, or medical sources. The potential for these accidents has been present for many years. Recent events also have highlighted the potential for non-accidental radioactive contamination as a result of criminal or terrorist actions. Besides, internal contamination occurs when radioactive material is ingested, inhaled, or absorbed from a contaminated wound.

2 As long as these radioactive contaminants remain in the body, they may **pose** significant health risks. The risks are largely long term in nature and depend not only on the type and concentration of the radioactive contaminant absorbed, but also on the health status of the exposed individual. The potential for development of cancers of the lung, liver, thyroid, stomach and bone, among others, are principal long-term health concerns, as are fibrotic changes in tissues such as lung, which may lead to restrictive lung disease and other chronic **debilitating** conditions.

3 The only effective method of reducing these risks is the removal of the radioactive contaminants from the body. The long latency of these conditions means that evaluation and treatment of internal contamination should not take precedence over treatment of injuries that may be acutely life threatening. However, early recognition of internal contamination provides the greatest opportunity for radioactive contaminant removal.

4 Moreover, protective actions that limit the ingestion of the radiation dose can be by avoiding the contamination that could occur on the surface of, or be **incorporated** into, human food and animal feeds. Such actions can be taken prior to and/or after confirmation of contamination. The protective actions for a specific accident are usually determined by the demands of the situation, and once initiated, they continue at least until the concentrations are expected to remain below the risky level.

5 Within the area likely to be affected and **prior** to confirmation of contamination, protective actions which can be taken consist of, first, simple precautionary actions to avoid or reduce the potential for contamination of food and animal feeds; second, temporary prohibitive measures to prevent introducing into commerce the food which is likely to be contaminated. Also, protective actions can be taken before the release or arrival of contamination if there is advance knowledge that radionuclides may accidentally contaminate the environment.

6 Simple precautionary actions include modest adjustment of normal operations prior to arrival of contamination. These will not guarantee that contamination in food will be below the risky level, but the severity of the forthcoming problem would be significantly reduced. Typical precautionary actions include covering exposed products, moving animals to shelter, corralling livestock and providing protected feed and water.

7 Protective actions to reduce the impact of contamination in or on animal feeds, including pasture and water, should also be taken on a case-by-case basis. Accurately forecasting the transfer of radioactive contamination through the agricultural pathway, from animal feed to human food, is questionable. The forecast is influenced by many factors, including the type of feed (e.g., fresh pasture, grain), other intakes (e.g., other feeds, supplements), the chemical form of the radionuclide, medications being administered, the animal species and the type of resulting human food (e.g., milk, meat, eggs).

8 Protective actions that could be taken when animal feeds are contaminated include the substitution of uncontaminated water for contaminated water as well as the removal of lactating dairy animals and meat animals from contaminated feeds, with substitution of uncontaminated feed. Enclosing livestock in an uncontaminated area could also be effective. The protective actions would be determined by State and local officials, with assistance from growers, producers, and manufacturers.

Questions:

A- Answer each of the following questions in 1-3 sentences using your own words.

- 1- What types of radioactive contamination does the writer refer to in paragraph 1? **(Score: 02)**
- 2- Based on paragraph 3, what condition helps in removing the radioactive contaminants from the body? **(Score: 02)**
- 3- Based on paragraph 7, what is the writer doubtful about? Explain why. **(Score: 02)**
- 4- How can you best describe the writer's tone in the selection? Justify your answer? **(Score: 02)**

B-

- 1- What is the thematic relationship between paragraphs 4 and 5? Explain. **(Score: 01.5)**
- 2- What two types of audience might be interested in reading this selection? Explain the interest of each. **(Score: 02)**
- 3- What is the organizational pattern of paragraph 7? Explain. **(Score:01.5)**

C- The following sentences are false for they misinterpret what is stated or implied in the text. Rewrite each correctly. **(Score: 02)**

- 1- Health risks caused by the absorbed radioactive contaminant depend on the type and period of contamination in the body.
- 2- State and local officials alone decide on the protective actions because it is beyond the capacity of growers, producers and manufacturers.

D- Write a one-sentence summary of paragraph 4. **(Score: 02)**

E- Based on the selection, what does each of the following underlined pronoun and phrases refer to? **(Score: 03)**

- 1- these risks (Paragraph 3)
- 2- Such actions (Paragraph 4)
- 3- These (Paragraph 6)

F- Give the meaning of the following words using contextual clues. **(Score: 04)**

- 1- pose (Paragraph 2)
- 2- debilitating (Paragraph 2)
- 3- incorporated (Paragraph 4)
- 4- prior (Paragraph 5)

Part Two: Writing

(Score: 16/40)

Choose ONE of the following prompts:

Prompt (A): Read the following statement from an article about food safety.

Food contamination is a health-threatening problem that happens when something gets into food and shouldn't be there. It can be biological contamination when bacteria or toxins contaminate food, causing food poisoning. It can also be chemical contamination when food comes into contact with chemicals that lead to chemical food poisoning. However, the best way to protect food is by maintaining food safety practices.

Write an essay in which you explain the above statement. As you develop your essay, refer to the dangerous effects of contaminated food on human beings and then explain the practices that ensure food safety when storing, processing, displaying or packaging food.


In your essay, provide a thesis statement in the introduction, a topic sentence in each body paragraph and support the main idea with relevant, specific and adequate details. Give examples drawn from your reading, experience or observation. Your essay should be between 250-300 words with an appropriate title. Revise and proofread your essay.

Prompt (B): Read the following statement about the use of nuclear power.

Nuclear power is used to produce both energy and nuclear weapons. Discharges from nuclear weapons contaminate the air, soil, people, plants, and animals with radioactive material over vast areas. Although the use of nuclear weapons is prohibited worldwide the use of nuclear power to produce energy should also be prohibited.

Write an argumentative essay in which you argue *for* or *against* the above statement. As you develop your essay, support your position by drawing on logical reasoning and experience. In your supporting paragraphs provide relevant, specific, and adequate evidence and examples from your reading, experience or observation. Your essay should be between 250-300 words with an appropriate title. Revise and proofread your essay.

Your essay will be evaluated based on content and organization of ideas (Score: 07), language and style (Score: 07), tidiness and legible handwriting (Score: 02).

<p>المادة : لغة إنكليزية الشهادة : الثانوية العامة فرعا : العلوم العامة وعلوم الحياة نموذج : رقم (4) المدة : ساعتان ونصف</p>	<p>الهيئة الأكاديمية المشتركة قسم: اللغة الإنكليزية وآدابها</p>	 <p>المركز التربوي للبحوث والإنماء</p>
--	---	---

أسس التصحيح (تراعي تعليق الدروس والتوصيف المعدل للعام الدراسي 2016-2017 وحتى صدور المناهج المطورة)

A-

- 1- The writer refers to three categories of radioactive contamination. The first is accidental radioactive contamination from nuclear, industrial and medical sources. The second is non-accidental contamination from probable terrorist actions, and the third is internal contamination from radioactive material inhaled or absorbed by the body.
- 2- Recognizing the internal contamination as early as possible helps in removing the radioactive contaminants from the body.
- 3- The writer is doubtful about the accuracy of predicting the transfer of radioactive contamination from animals to human food. The reason is that there are many factors involved in this prediction such as the animal feed and species and the resulting human food.
- 4- The writer's tone is neutral. The writer gives facts about the problem of radioactive contamination as well as actions to prevent it.

B-

- 1- It is a relationship of addition. In paragraph 4, the writer explains how and when to use protective actions to limit radiation risks. In paragraph 5, the writer explains that these preventive actions include simple precautionary actions and temporary prohibitive measures.
- 2- Audience like doctors might be interested in reading this selection to understand the effects of radioactive contamination on the human body. Also, governmental members might learn about measures that can be taken to protect people from radioactive contamination.
- 3- It is a pattern of organization of listing. The writer lists the factors that influence the forecasting of radioactive contamination transfer.

C-

- 1- Health risks caused by the absorbed radioactive contaminant depend on the type and concentration of the contaminant in the body as well as the health condition of the affected person.
- 2- State and local officials decide on the protective actions with the help of growers, producers, and manufacturers.

D- To reduce the contamination risks, protective actions can be taken based on the situation demands by avoiding contamination before and/or after it happens.

E-

- 1- "these risks" in paragraph 3 refers to health risks of contamination.
- 2- "Such actions" in paragraph 4 refers to protective actions.
- 3- "These" in paragraph 6 refers to precautionary actions.

F-

- 1- "pose" means cause or make it happen.
- 2- "debilitating" means weakening.
- 3- "incorporated" means integrated or absorbed.
- 4- "prior" means earlier or before .