

الدرجة (70)

أجب عن الأسئلة الخمسة التالية

The first question: Translate these scientific texts into Arabic and English language. (16 marks)

- Phthalates are used in cosmetics and personal care products, including perfume, hair spray, soap, shampoo, nail polish, and skin moisturizers. They are used in consumer products such as flexible plastic and vinyl toys, shower curtains, wallpaper, vinyl miniblinds, food packaging, and plastic wrap.

تستخدم الفثالات في مستحضرات التجميل والعناية الشخصية، بما في ذلك العطور، وريش الشعر، والصابون، والشامبو، وطلاء الأظافر، ومرطبات البشرة. كما تستخدم في المنتجات الاستهلاكية، مثل الألعاب البلاستيكية المرنة والفينيل، وستائر الاستحمام، وورق الجدران، والستائر الصغيرة المصنوعة من الفينيل، وتغليف الأطعمة، والأغلفة البلاستيكية. (4 درجات)

- The positive relation between neighborhood well-being and range of natural features which include species richness and abundance of birds has been confirmed.

تم تأكيد العلاقة الإيجابية بين رفاهية الحي ومجموعة من الميزات الطبيعية والتي تشمل ثراء الأنواع ووفرة الطيور (4 درجات)

- Animal diseases are also an important environmental problem associated with livestock in agriculture. They are generally transmitted by direct contact with infected animals or through contaminated food, water, soil or animal excreta. Most workers are not aware of the proper hygienic and sanitary measures to prevent or control the transmission of these diseases.

تعد أمراض الحيوانات أيضاً مشكلة بيئية هامة مرتبطة بالثروة الحيوانية في الزراعة. تنتقل هذه الأمراض عادة عن طريق الاتصال المباشر بالحيوانات المصابة، أو من خلال الغذاء أو الماء أو التربة أو فضلات الحيوانات الملوثة. ولا يدرك معظم العاملين الإجراءات الصحية والوقائية المناسبة للوقاية من انتقال هذه الأمراض أو السيطرة عليها. (4 درجات)

- يمكن أن تسبب الملوثات البيئية مشاكل صحية مثل أمراض الجهاز التنفسي وأمراض القلب وبعض أنواع السرطان. وتقدر منظمة الصحة العالمية أن هناك 1.2 مليون وفاة على مستوى العالم سنوياً تعزى إلى المخاطر المهنية، والتي تتعلق بـ 2.1% من جميع الوفيات بين عامة السكان.

Environmental pollutants can cause health problems such as respiratory diseases, heart disease and some types of cancer. The World Health Organization estimates that 1.2 million deaths worldwide each year are attributable to occupational hazards, which accounts for 2.1% of all deaths in the general population. 4 درجات

The second question: Choose the correct term for each of the following definitions. (21 marks)

1- Tetanus and Botulism are examples of diseases caused by

C. Soil-borne microbes

2- Term "guano" means

B. Organic fertilizers

3- Exposure to high levels of Mn over several years can lead to

A. Nervous system toxicity similar to Parkinsonism

A dose that causes 50% of a population to exhibit any significant response is referred to as the

A. ED-50

5 - A key concept underlying radiation protection programs is

C. A and B

6- A material that induces genetic changes in the DNA:

A. Mutagen

7. Minamata disease is caused by.

C. Methyl mercury

The third question: What causes each of the following? (22 marks)

Shigella, Formaldehyde, Arsenic, Schistosomiasis, Phthalates, DDT compounds, Algal Blooms, Salmonella, lead, Vinyl chloride, NO_x

درجتيں لكل اجابة

1. **Shigellosis**, or Shigella infection caused by Shigella bacteria, is a disease that affects your digestive system. It produces stomach pain, diarrhea and fever in people who are infected. Shigella is very contagious.
2. **Formaldehyde** can cause irritation of the eyes, nose, and throat, even at low levels for short periods. Longer exposure or higher doses can cause coughing or choking. Severe exposure can cause death from throat swelling or from chemical burns to the lungs.
3. **Arsenic**: Inorganic arsenic compounds (such as those found in water) are highly toxic while organic arsenic compounds (such as those found in seafood) are less harmful to health. The immediate symptoms of acute arsenic poisoning include vomiting, abdominal pain and diarrhoea.
4. **Schistosomiasis**: At first, there are often no symptoms of schistosomiasis but within one to two months of infection, symptoms may develop including fever, abdominal pain (liver/spleen area), bloody diarrhoea or blood in the stools or urine, coughing, malaise, headaches, rashes and body aches.
5. **Phthalates** are a class of chemicals with endocrine-disrupting properties. These chemicals are associated with health harms including increased risk of cancer, asthma and allergies, and learning attention and behavioral difficulties in children.
6. **DDT compounds**: breast cancer, diabetes, decreased semen quality, spontaneous abortion, and impaired neurodevelopment in children.
7. **Algal Blooms** Some types of algae can cause irritation and allergic reactions on direct contact, while others may also produce harmful toxins (poisons). Drinking algae-affected water or consuming food (such as fish or shellfish) containing toxins can lead to gastroenteritis, which can induce vomiting, diarrhoea, fevers and headaches. These toxins may also affect the liver or nervous system.
8. **Salmonella infections**, or salmonellosis, are caused by consuming Salmonella bacteria, primarily through contaminated food or water, or by contact with infected animals or people.
9. **Lead**: Exposure to even low levels of lead can cause damage over time, especially in children. The greatest risk is to brain development, where irreversible damage can occur. Higher levels can damage the kidneys and nervous system in both children and adults.
10. **Vinyl chloride** exposure can cause a range of symptoms depending on the duration and concentration of exposure, including acute effects like dizziness, headache, and central nervous system depression, and long-term effects such as liver damage and an increased risk of liver cancer (angiosarcoma).
11. **Exposure to NO_x** can cause various symptoms, primarily affect the respiratory system and eyes, and depend on the concentration and duration of exposure, symptoms can range from mild irritation to severe and potentially life-threatening conditions like pulmonary edema. Low-level exposure can lead to irritation of the eyes, nose, throat, and lungs, resulting in coughing, shortness of breath, tiredness, and nausea. Higher levels can cause more severe reactions, including rapid burning, spasms, and swelling of tissues in the throat and upper respiratory tract, reduced oxygenation, fluid in the lungs, and even death.

The fourth question: What are occupational diseases? What are workers three basic rights? (7 marks)

Occupational Disease, any illness associated with a particular occupation or industry. Such diseases result from a

variety of biological, chemical, physical, and psychological factors that are present in the work environment or are otherwise encountered in the course of employment. (درجتين)

The right to know information that could affect their health and safety (درجة 1.5); The right to participate in health and safety decisions in the workplace (درجة 1.5); and the right to refuse work that they feel is unsafe (درجتين).

The fifth question: Mention 4 diseases that are linked to contaminated water. (4 marks)

Cholera, diarrhoea, dysentery, hepatitis A, typhoid and polio. (لكل تعداد درجة واحدة فقط)

انتهت الأسئلة