



English Language Exam

Section One: Reading Comprehension: (30 Marks)

Read the following passage and then answer the questions that follow:

Vaccines are prepared from harmful viruses or bacteria and administered to patients to provide immunity to specific diseases. The various types of vaccines are classified according to the method by which they are derived.

The most basic class of vaccines actually contains disease-causing microorganisms that have been killed with a solution containing formaldehyde. In this type of vaccine, the microorganisms are dead and therefore cannot cause disease; however, the antigens found in and on the microorganisms can still stimulate the formation of antibodies. Examples of this type of vaccine are the ones that fight influenza, typhoid fever, and cholera.

A second type of vaccine contains the toxin produced by the microorganisms rather than the microorganisms themselves. This type of vaccine is prepared when the microorganisms itself does little damage but the toxin within the microorganisms is extremely harmful. For example, the bacteria that cause diphtheria can thrive in the throat without much harm, but when toxins are released from the bacteria, muscles can become paralyzed and death can ensue.

A final type of vaccine contains living microorganisms that have been rendered harmless. With this type of vaccine, a large number of antigen molecules are produced and the immunity that results is generally longer lasting than the immunity from other types of vaccines. The Sabin oral antipolio vaccine and the BCG vaccine against tuberculosis are examples of this type of vaccine.

1. How are vaccines prepared?
2. What is the importance of vaccines?
3. What are the diseases that vaccines can cure?
4. What does the basic class of vaccines contain?
5. Suggest a title for the passage.

II-Read these sentences and say whether they are true or false and justify your answer:

- | | |
|--|-----|
| 1-Vaccines cannot provide immunity to diseases | () |
| 2-There are four types of vaccines presented in the passage | () |
| 3-Vaccines contain disease causing microorganisms | () |
| 4-Vaccines are derived in different ways | () |
| 5-Cholera is an example of vaccine that contains living microorganisms | () |

III- Find the following from the passage:

The antonym of: 1-general 2- secondary

The synonym of: 1- grouped 2- set free 3- result

Section Two: Grammar Focus: (40 Marks)

I- Choose the correct answer:

1. Having (did – done – doing – do) his homework, he returned home.
2. The machines (using-use-used-uses) in our factory are up-to-date.
3. The bus was very late (yet-however-as well-so) we decided to take a taxi.
4. Ashraf (whom-which-who-whose) wife is ill, cannot come to the party.
5. We still need two to make (up-about-out-off) the team.

II- Do as shown in brackets:

1. Violent winds pull out tress (begin with trees)
2. The girl who has golden hair, answer well (omit who)
3. Whatever you decide (complete)
4. Wilson is ugly and fat. Wilson is my brother's dog.
(combine by making an appositive phrase)
5. The movie made me laugh. (add prepositional phrase)
6. Switzerland is among two mountain ranges. (correct the underlined word)
7. He was seriously ill. He couldn't work at all. (Being)
8. Mary can solve her problems. She is intelligent
(combine by using a relative pronoun)
9. Naguib Mahfouz was the writer (complete)
10. Can you tell me where my things are at? (correct)
11. Geometry /study / properties/figures. (make a definition)
12. A botanist / a person / studies plants. (make a definition)
13. The rotary pump is inferior to the reciprocating pump in being more efficient.
(Use Superior)
14. Steel castings are low- carbon steels and medium carbon steels.
(rewrite using "classified commercially")
15. Chemistry /science/ deals with the composition and behavior of substances.
(make a definition)

... the passage

... 2- second

... 2- six feet

Answer: Focus (40-10-10)

... answer:

done - doing - do
(using use-need-need)
very late (sat-1-1)
which-which-which
two to make (1-1-1)

... in practice

... pull out

... who has

... you decide

... only and

... is only

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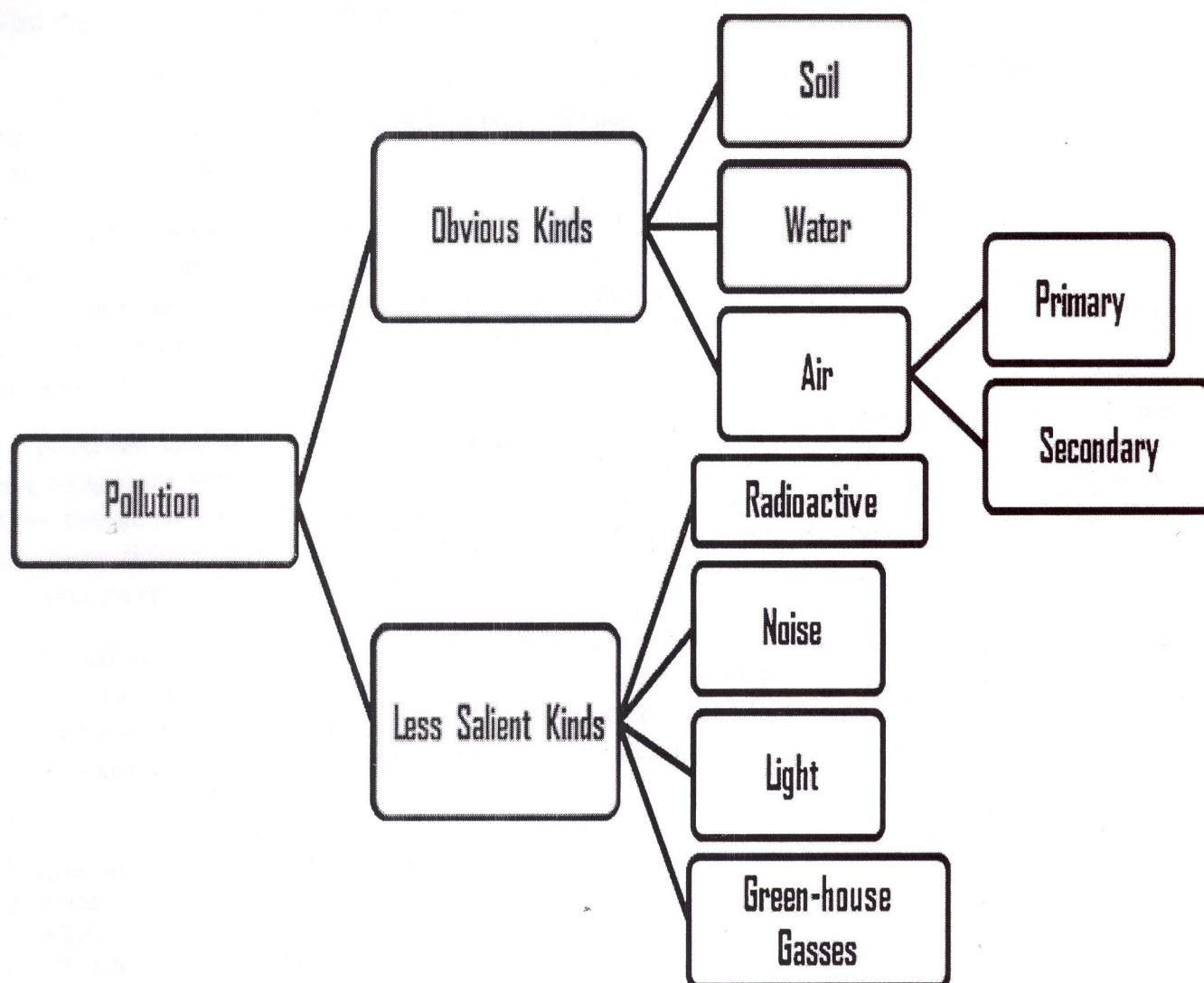
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Section Four: Writing Skills: (20 Marks)

Look at the following diagrammatic classification; write a paragraph on the different kinds of pollution:



GOOD LUCK

المستوى : الأول		دور: يناير 2014
المادة : جبر وهندسة		الزمن : ساعتان
كود المادة : (111)	كلية العلوم - قسم الرياضيات	التاريخ : 2014/1/15

البرامج: كيمياء-الكيمياء الحيوية- كيمياء وحيوان- ميكروبيولوجي- كيمياء ونبات-علوم بيئة- جيولوجيا- جيوفيزيكا

أجب عن الأسئلة الآتية: الدرجة الكلية : 80 درجة

السؤال الأول:

أ - استخدم مبدأ الاستنتاج الرياضي في اثبات أنه لاى عدد طبيعي $n \in \mathbb{N}$ فان:
(10 درجات) $(n^2 + n + 2)$ يقبل القسمة على 2.

ب - حلل الكسر $\frac{x^3}{(x-2)(x^2-4)}$ إلى كسوره الجزئية .
(10 درجات)

السؤال الثاني:

أ - عين معادلة القطع المكافئ الذى رأسه $(-1, 3)$ و بؤرته $(-1, 2)$ ثم اوجد طول الوتر البؤرى العمودى وكذلك معادلتى المحور والدليل مع الرسم.
(12 درجة)

ب - ضع العدد المركب $z = \frac{1+7i}{(2-i)^2}$ فى الصورة المثلثية ثم اوجد $z^{\frac{4}{3}}$.
(8 درجات)

السؤال الثالث:

أ - باستخدام طريقة كرامر اوجد حل المعادلات الآتية:
(10 درجات) $2x + 3y + z + 2 = 0$, $5x + 4y + 2z - 4 = 0$, $x - y - 2z + 1 = 0$
ب - ارسم القطع $x^2 + 4y^2 + 16y + 6x + 21 = 0$ موضحا جميع المعلومات الخاصة به.
(10 درجات)

السؤال الرابع :

أ - اوجد نقطة تقاطع المستقيمين $2x - y - 1 = 0$, $4x - y - 3 = 0$ والزاوية بينهما
ثم اوجد معادلة المستقيم الذي يمر بنقطة التقاطع ويوازي المستقيم $x - 2y + 5 = 0$
(10 درجات)

ب - باستخدام نظرية ديموافر اوجد مفكوك $\sin 4\theta$, $\cos 4\theta$ بدلالة قوى $\sin \theta$, $\cos \theta$
(10 درجات)