

**YEAR: 9**

**2017**

**SUBJECT: Science**

**TEST: Endocrine system & Diseases**

**TIME: 40 minutes**

**QUESTIONS: 10 Multiple Choice (10 marks)**

**5 Short Answer (18 marks)**

**TOTAL MARKS: 28 marks**

**DO NOT WRITE ON OR MARK THIS PAPER**

Section 1 – Multi-choice **(10 marks)**

1. Name the hormone that helps control water levels in the blood.
2. thyroid stimulating hormone
3. insulin
4. antidiuretic hormone
5. epinephrine
6. Which of these will be in the 1st line of defence?
   1. Skin
   2. Macrophages
   3. Leukocytes
   4. Neutrophils
7. The role of the antibody is
   1. To ingest pathogens
   2. Release a chemical that causes increased blood flow to the infected area
   3. To cause the pathogens to clump together so macrophages can destroy more at one time
   4. To activate the third line of defence
8. Chemicals that cause your body to react as if it has met a pathogen before are called
   1. Antibodies
   2. Vaccines
   3. Antivirals
   4. Neutrophils
9. If neutrophil activity is visible what line of defence has been breached?
   1. 1st line
   2. 2nd line
   3. 3rd line
   4. All of the above
10. Penicillin is
    1. A pathogenic bacteria
    2. The first successful antiviral
    3. An infectious disease
    4. The first successful antibiotic
11. Which of the following is NOT a white blood cell?
    1. Leukocyte
    2. Antibody
    3. Neutrophil
    4. Macrophage
12. Diseases that are easiest to spread are known as
    1. Infectious
    2. Contagious
    3. Pathogenic Bacteria
    4. Quarantine
13. To prevent the spread of disease, an infected person
    1. May be placed in quarantine
    2. Told to contact lots of people so they can build immunity
    3. Will be automatically given antibiotics
    4. Will be told to continue on with their normal lives
14. Which disease has a vaccine available for it?
    1. Influenza
    2. HIV
    3. Leprosy
    4. Ebola



**SEMESTER ONE 2017**

**Endocrine system & Diseases Test:**

**ANSWER BOOKLET**

**NAME:**

**FORM:** **DATE:**

Multiple Choice Short Answer Total

**/18**

**/10**

**/15**

**/28**

**/30**

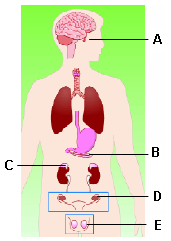
**SECTION ONE:** Multiple choice answers

Cross (X) through the correct answer.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1** | a | b | c | d |
| **2** | a | b | c | d |
| **3** | a | b | c | d |
| **4** | a | b | c | d |
| **5** | a | b | c | d |
| **6** | a | b | c | d |
| **7** | a | b | c | d |
| **8** | a | b | c | d |
| **9** | a | b | c | d |
| **10** | a | b | c | d |

**Section 2 Short Answer**

11. The diagram shows the location of the major endocrine glands in the human body. Select the correct labels from these choices: pituitary, testis, ovary, pancreas, adrenal glands.



**A** pituitary  
**B** pancreas  
**C** adrenal glands  
**D** ovary  
**E** testis **(5 marks)**

12. List two differences between antibiotics and vaccines. (**2 Marks**)

Bacterial infections are treated with antibiotics. (1/2)

Substances that kill or prevent the growth of bacteria are antibiotics. (1/2)

13. Explain the three lines of defence that the body has to prevent infection. (**3 marks**)

|  |  |
| --- | --- |
| Line of Defence | How does it prevent infection? |
| 1st | Skin protects the internal organs from harmful chemicals in the environment and from sunlight. |
| 2nd | Neutrophils (White blood cells) have been at work when the skin is inflamed and starts consuming bacteria. |
| 3rd | The lymphatic system carries lymphocytes and macrophages that destroy foreign proteins and manufacture antibodies. |

1. What are the common allergy symptoms? What treatment can be given for an allergic reaction?

(**4 marks**)

Symptoms

* A runny nose and watering or itching eyes are common to many persons who suffer each year from hay fever
* An inflammation of the skin (contact dermatitis) may occur from wearing rubber gloves or touching a certain chemical, such as some kinds of soap.
* A reaction to antibiotics, particularly penicillin, may take the form of a rash.
* In asthma, there is wheezing; with eczema and hives there is itching, redness, and lumps.

( Any two allergy symptoms – 2 marks)

Treatment

* Various medications, including theophylline, are used to treat asthma.
* Epinephrine: For anaphylaxis
* A corticosteroid cream or ointment may be used for skin reactions.
* Corticosteroid nasal sprays reduce the discomfort of a "stuffy" nose.
* Allergy eyedrops are liquid medicines used to treat symptoms of eye allergies.
* Montelukast (Singulair) is a prescription drug that reduces congestion in your nose, cuts down on sneezing, itching, and eye allergies, and reduces inflammation in your airways.

( Any two like above – 2 marks)

1. Explain how vaccines are created and how they work within the body to prevent infection.

(**4 marks**)

Creation of vaccine

* Taking a small amount of the poison produced by the bacterium and making it inactive or by using a dead bacteria ( Any of these -1 mark)

Preventing infection

* Used to cause an immune response (1 mark)
* Body produces antibodies specific to disease ( 1 mark)
* Actual pathogens cause a faster immune response because the body “remembers” it, killing disease before infection can occur (1 mark)