

GREENLAWNS SCHOOL, WORLI

FINAL EXAMINATION: 2015-2016

BIOLOGY

Std: VIII

Date: 22/02/2016

Marks: 80

Time: 2 hrs

Answers to this paper must be written on the paper provided separately. You will not be allowed to write during the first 15 minutes. This time is to be spent in reading the Question paper. The time given at the head of this paper is the time allowed for writing the answers. Section I is compulsory. Attempt any four questions from Section II. The intended marks for questions or parts of questions are given in brackets [].

SECTION I (40 Marks)

Attempt all questions from this section

Question 1

- (a) Name the following: [5]
- A pattern of several interconnecting food chains.
 - The pigment present in the skin of man.
 - The enzyme which converts starch into maltose.
 - The bones of the fingers.
 - The vaccine for tuberculosis.
- (b) State whether the following statements are true or false. If false, rewrite the correct statement: [5]
- Leucoderma is a condition where the skin pigment is completely lost.
 - Cholera is a viral disease.
 - Sternum is a part of axial skeleton.
 - The end product of carbohydrate digestion is glucose.
 - The green plants in a forest are consumers.
- (c) Give one difference between the following pairs on the basis of what is indicated in the brackets: [5]
- Axial and appendicular skeleton (number of bones)
 - Enamel and dentine (meaning)
 - Roundworm and tapeworm (disease caused)
 - Malphigian and cornified layer (location)
 - Yellow marrow and red marrow (composition)
- (d) Define the following terms: [5]
- | | |
|-------------------|--------------------|
| i. Peristalsis | iv. Hair follicle |
| ii. Girdles | v. Endemic disease |
| iii. Food pyramid | |

(e) Write the functions of:

[5]

- i. Nail matrix
- ii. Liver
- iii. Molars
- iv. Tendons
- v. Ceruminous glands

(f) Complete the following:

[5]

- i. The biceps and triceps of the human arm are an example of _____ muscles.
- ii. The opening of stomach into the intestine is called _____ and it has a ring of muscles called _____ to keep the opening closed.
- iii. _____ means the plants naturally occurring in a particular area, and similarly _____ means the animals naturally living in that area.
- iv. _____ vaccine is effective against polio.
- v. The name hepatitis refers to _____
- vi. Haemophilia and Thalassemia are examples of _____ disease.
- vii. Goose flesh is caused due to the contraction of _____
- viii. Synovial fluid acts as a _____ to the joint.

(g) Give reasons for the following:

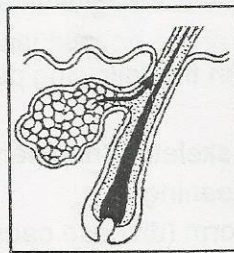
[5]

- i. Small intestine is provided with villi.
- ii. House fly is called public enemy no. 1.
- iii. Soil is the foremost component of the forests.
- iv. The 11th and 12th pair of the ribs of the bony thorax in humans is called floating ribs.
- v. Hypothalamus acts like a thermostat.

(h) The given diagrams represent glands in the human skin:



1



2

- i. Name the two glands. [1]
- ii. What is the location of these glands? [1]
- iii. Give the functions of these glands. [2]
- iv. Mention any two common problems related to the 2nd gland. [1]

SECTION II (40 Marks)

Attempt **any four** questions from this section

Question 2

(a) Draw the internal structure of an incisor tooth and label the following parts - [3]

Enamel, dentine, gum, cement and pulp

(b) AIDS was first recognized in the USA in 1981 and since then an increasing number of cases are reported every year from practically all over the world.

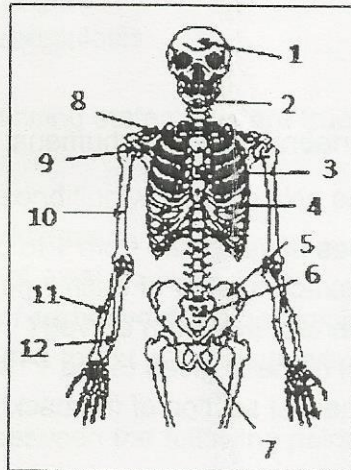
- i. Expand AIDS. [1]
- ii. Name the causative agent of AIDS. [1]
- iii. How is this disease transmitted? [1]

(c) Copy and complete the summary of digestion given in the table below: [4]

Secretion	Enzyme	Substrate	Product of digestion
Gastric juice			Polypeptides
Pancreatic juice	Steapsin		
Intestinal juice		Lactose	
	Maltase		

Question 3

Observe the figure given below and answer the questions that follow:



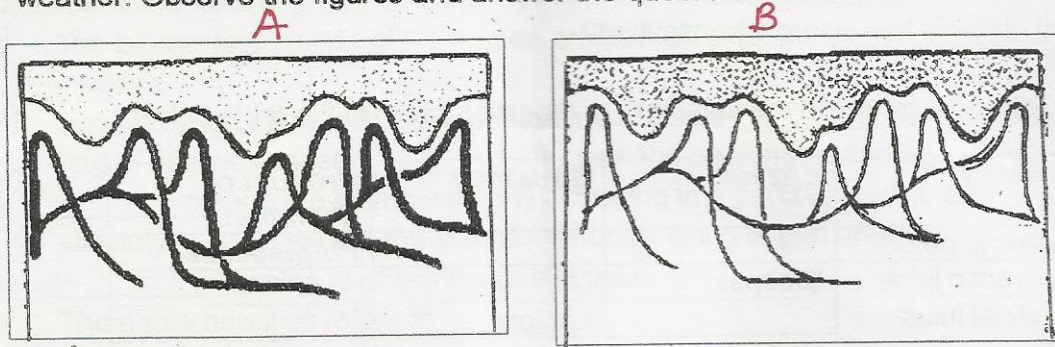
- i. Label the parts 1 to 12. [6]
- ii. Identify the joints present at 1 and 8. [1]
- iii. Mention any one place in this figure where cartilage is present. [1]
- iv. Give the distribution of the number of bones of axial skeleton. [2]

Question 4

- (a) What are ecosystems? Name any two ecosystems. [2]
- (b) What are the symptoms of mumps and cholera? [3]
- (c) Humans produce about 1000-1500 ml of saliva everyday
 - i. Name the three pairs of salivary glands that produce saliva. [1½]
 - ii. Give the exact location of the above mentioned salivary glands. [1½]
 - iii. State any two functions of saliva. [2]

Question 5

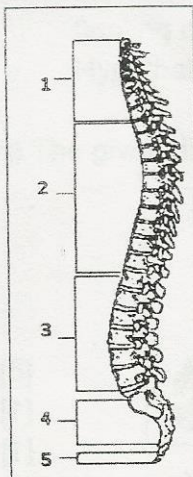
- (a) How do viruses differ from bacteria? [2]
- (b) Mention four different steps that are recommended to destroy mosquitoes in different stages. [2]
- (c) The figure below represents condition of the blood vessels in hot and cold weather. Observe the figures and answer the questions that follow:



- i. Identify the two conditions depicted in the figures above. [1]
- ii. How is the body temperature regulated by the conditions mentioned by you above? [4]
- iii. What is heatstroke? [1]

Question 6

- (a) The figure below represents vertebral column in humans:



- i) Name the types of vertebrae from 1 to 5. [2½]
- ii) Mention the exact number of each type in an adult. [2½]
- iii) Why is the vertebral column curved? [1]
- iv) What special name is given to the 1st and 2nd vertebrae? [1]
- v) What does the last section of the backbone represent? [1]

- (b) Give a brief account of the abiotic components of the ecosystem. [2]

**** All the best ****