

**2 0 1 4**

( November )

**ZOOLOGY**

( Major )

Course : 503

**( Animal Physiology )**

Full Marks : 48

Pass Marks : 19

Time : 2 hours

*The figures in the margin indicate full marks  
for the questions*

Answer Question No. 1 and any **three** from the rest

1. (a) Fill in the blanks : 1×5=5

(i) Muscle become rigid during rigor mortis due to loss of —.

(ii) Pepsinogen is converted into active pepsin by —.

(iii) Hirudin is an — found in salivary glands of leech.

(iv) Oxyhemoglobin after giving out its oxygen is called — hemoglobin.

(v) During urine formation — hormone promotes the reabsorption of  $\text{Na}^+$  and water.

(b) Write True or False :  $1 \times 5 = 5$

(i) In human heart, SA node is present in left auricle.

(ii) In a sensory neuron, impulse flows from axon to the cyton.

(iii) Lymph contains large number of erythrocytes.

(iv) Pulmonary veins carry pure blood.

(v) Bilirubin is greenish in colour and is found in the bile of gallbladder.

(c) Write short notes on (any two) :  $4 \times 2 = 8$

(i) Gastrointestinal hormones

(ii) Impact of drugs in society

(iii) Carbon monoxide poisoning

2. What is urine? Draw and describe how urine formation is regulated by nervous and endocrine system.  $1+3+3+3=10$

3. What is reflex? How many reflexes are found? Explain simple reflex arc with suitable diagram.  $1+2+4+3=10$

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4. Mention the names of carbohydrate splitting enzymes and their functions. Write the mechanism of protein absorption.  $2+3+5=10$

5. Differentiate between the following (any *two*):  $5 \times 2 = 10$

(a) Myelinated and Non-myelinated nerve fibre

(b) Coronary circulation and Cardiac circulation

(c) Actin and Myosin

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