

Version-A**PART – B
ZOOLOGY****HSE-I****(Maximum : 20 Scores)****Time : 1 Hour****I. Answer any 3 questions from 1 to 5. Each carries 1 score. (3×1=3)**

1. Which one of the following type of blood cells lack nucleus?
 - a. Erythrocytes
 - b. Neutrophils
 - c. Eosinophil
 - d. Monocytes
2. Most commonly used body fluid in human is
3. Name the granular bodies found within the cytoplasm of a neuron's cell body, alongside typical cell organelles?
4. Expand
 - a)GnRH
 - b)PRL
5. Note the relationship in the first pair and then complete the second pair.

Cockroach :Malpighian tubule

Earthworm :.....

II. Answer any 7 questions from 6 to 14. Each carries 2 scores. (7×2=14)

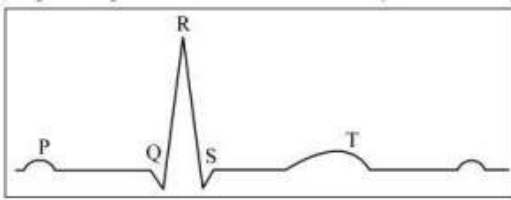
6. Give example(s) of:
 - a) Hypercalcemic hormone
 - b) Gonadotrophic hormones
 - c) Hyperglycemic hormone
 - d) Androgens

7. Match the following

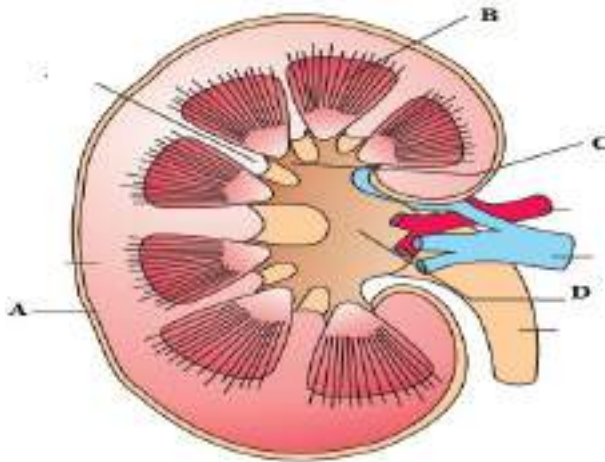
Column A	Column B
a)Basophils	i)It is associated with allergic reactions.
b)Eosinophils	ii)Secrete histamine, serotonin, heparin,
c)Neutrophils	iii)Phagocytic reaction
d)Lymphocytes	iv)Involved in immune response of the body

8. Identify and Name the endocrine gland, which is
 - a)Present on either side of trachea
 - b)Present between the lungs, behind the sternum and on ventral side of aorta

9. Name the mineral ion which play crucial role in muscle contraction. Explain its role in muscle contraction.
10. Differentiate between electrical and Chemical Synapse ?
11. a) Which theory explains the process of muscle contraction?
b) Name two contractile protein present in the muscle ?
12. Observe the diagrammatic presentation of ECG
a) Expand ECG
b) What do P and QRS complex indicate?



13. Observe the Diagram of human Excretory system and label A,B,C and D



14. A urine test of a patient shows the conditions like glycosuria and ketonuria
a) What are glycosuria and ketonuria?
b) Which diseases might the person be suffering from based on these findings?

III. Answer any 3 questions from 15 to 17. Each carries 3 scores. (1×3=3)

15. Name the hormone and its endocrine glands whose hormonal deficiency is responsible for the following:
a) Addisons disease b) Diabetes Insipidus c) Cretinism d) Dwarfism

16. Fill in the blanks

Types of muscles	Location	nature of regulation of their activities	Appearance
Skeletal muscles	closely associated with the skeletal components of the body A B
..... C D	Involuntary	Non striated
Cardiac muscle E F	Striated

17. The kidneys play a crucial role in the excretion of waste from the body.

- a) Name the three main steps involved in the formation of urine.
- b) How do the heart and hypothalamus regulate kidney functions?

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