

## MODEL QUESTION PAPER – ZOOLOGY

HSE (I)

Cool-off time: 8 min

Time: 1 hr.

Score: 30

1) Match the following:

Enzyme	Substrate	Product
Ptyalin	Lactose	Maltose
Pepsin	Protein	Trypsin
	Lipid	Fatty acid
	Starch	Peptides

(Score: 2)

2) Find out the mismatching pair:

a) Albumin – Provides the colloid osmotic pressure in plasma

b) Globulin – Acts as antibodies

c) Fibrinogen – Transportation of nutrients

(Score: 1)

3) Complete the blanks:

Characters	Phylum
a) Body has similar segments	
b) Body has jointed legs	
c) Body has water vascular	
d) Body is cylindrical	

(Score: 2)

4) Given below are the names of taxa and examples at different hierarchal levels. Arrange them in the correct order:

Kingdom Felidae Species Carnivora Phylum Panthera Order Mammalia Class leo Genus Anemalia  
Family Chordata.

(Score: 1)

5) Suppose you dramatically escaped from a motor accident. Your heart beat and rate of respiration was increased at the moment.

a) Name the hormone involved in this change. (1)



b) Which part of the nervous system controls these actions? (1)

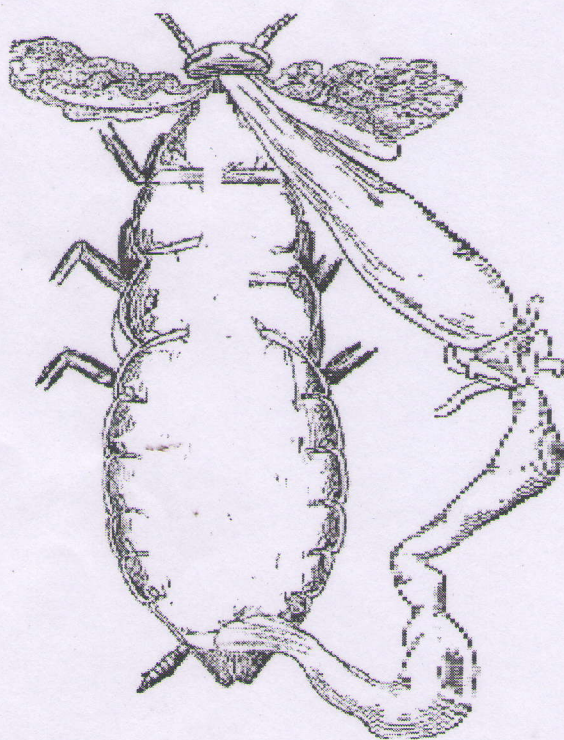
c) Enlist the other physiological changes that you may feel at that time. (1) (Score: 3)

6) Few gaps have been left in the following table showing certain terms and their meanings. Fill up the gaps:

No.	Terms	Meanings
1	Amino acids	------(a)-----
2	------(b)-----	The combination of a base, a sugar & phosphate
3	Ligase	------(c)-----
4	------(d)-----	A tightly bound non-protein component of an enzyme

(Score: 2)

7) Copy the diagram:



(1)

Label the following parts & write down their functions:

A) Hepatic caeca      b) Gizzard

(1x2=2)

(Score: 3)

8) During respiration air enters the body through the external nostrils & reaches the bronchioles through the air passages. Prepare a flow chart showing the route of air movements. (Score: 2)

9) Primates dominate all other mammals. Give reason? (Score: 1)

10) A sharp tap is given at your knee cap with rubber hammer. You suddenly stretch your leg.



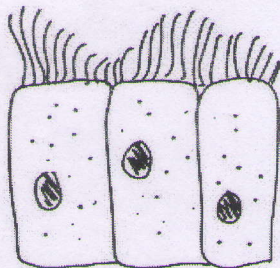
a) Name the response. (1/2)

b) Which nerve centre is involved in this action? (1/2)

c) Construct a flow chart for the pathway of impulses in this action. (2)

(Score: 3)

11) Observe the diagram & answer the following questions:



a) Identify the tissue. (1/2)

b) Write the location where it is found. (1/2)

c) Mention its function. (1)

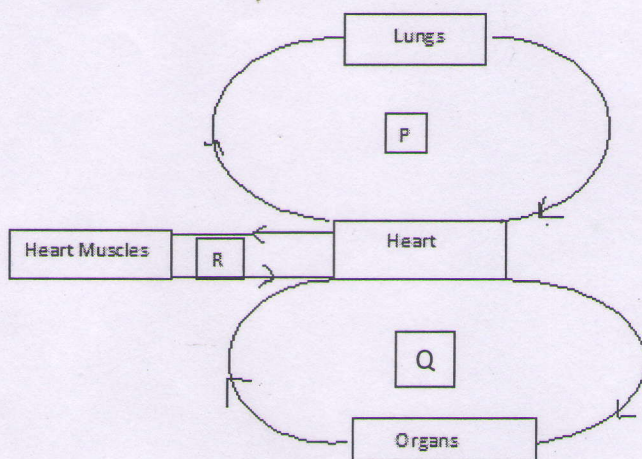
(Score: 2)

12) Study the diagram & answer the questions:

a) Which one is lesser circulation? (1/2)

b) Name the circulation which supplies blood to the heart muscles. (1/2)

c) Which one is systemic circulation & write down its function. (1)



(Score: 2)

13) Based on the nitrogenous material excreted, classify the below organisms:



Birds, bony fishes, cartilaginous fishes, tadpole, Crocodile, snakes, frog, man, elephant, terrestrial insects, aquatic insects, land snails. (Score: 2)

14) Compare the following condition with special reference to hormonal action:

First messenger & second messenger (Score: 1)

15) Write down the bones in which the following structures are found:

Foramen magnum, Acetabulum, Glenoid cavity, Acromion (Score: 2)

16) "It is a clear colourless fluid, similar to blood plasma, except that it has much lower proportion of protein & cholesterol. It is present in the sub-arachnoid space." Identify the fluid and give its function.

(Score : 1)

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