

MODEL EXAMINATION 2011-12

HSE I

Part III – BIOLOGY
Part B – ZOOLOGY

Marks: 30
Time: 1 hr

1. *Homo sapiens* is the scientific name of human beings. Write any two features of binomial nomenclature.

Score 1

2. Identify the figure?



a. Mention its function?

Score 1

b. List any four features of the phylum in which this structure belongs?

Score 2

3. Match the column A with B and C

Score 2

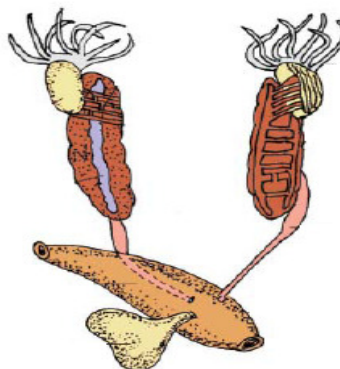
A	B	C
a. Platyhelminthes	Gills	Nereis
b. Annelida	Flame cells	Tape worm
c. Arthropoda	Nephridia	Pila
d. Mollusca	Malpighian tubules	Cockroach

4. Find the odd one and give reason.

Score 1

Flying fish, Angel fish, Jelly fish, Dog fish

5. The following diagram shows the male reproductive system of frog.



a. Copy the diagram?

Score 1

b. Label the following parts in the diagram. (Testis, Rectum, Cloaca, Urinogenital duct) Score 2

6. By observing the first relation, find out the missing word?

Score 1

a. Bone to bone: Ligament :: Bone to muscle:

7. Find out the appropriate biomolecules and match it with the items given below. Score 2

a. Biological catalyst:.....

b. Genetic material:.....

(Amino acid, Glycogen, Enzymes, Nucleic acids, fats)

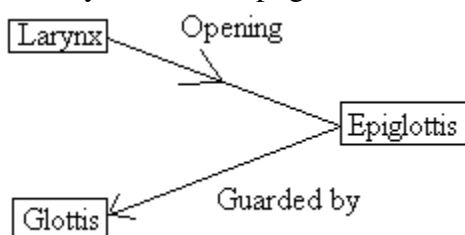
8. Name two types of bonds found in biomolecules formed by dehydration? Score 1

9. Write down the dental formula for the Score 2

a. Milk dentition in man

b. Permanent dentition in man

10. Analyse the concept given below and if there is any mistake reconstruct it.? Score 2

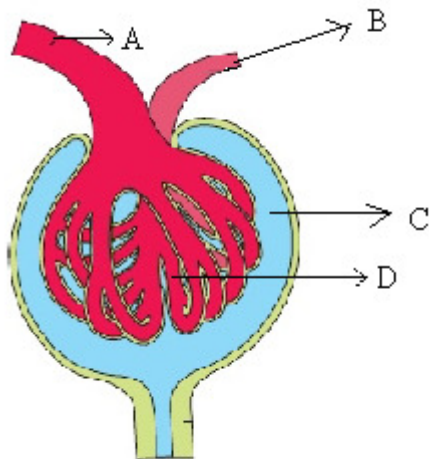


11. a. Prepare a correct flow chart showing the spreading of cardiac impulse by using the following structures. Score 2

(AV node, Bundle of His, Purkinje fibres, SA Node, Right and Left Branches of Bundle of His)

b. Which is known as the pacemaker of the Heart? Score 1

12. The diagram of the Bowman's capsule is given below.



Redraw and label the parts A, B, C & D

Score 2

13. Write the expansion of the following.

a. FSH

b. ACTH

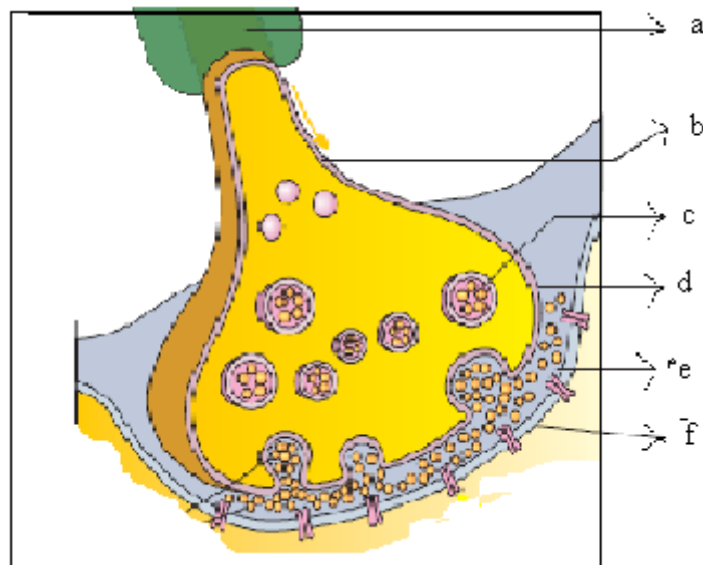
c. ADH

d. TSH

Score 2

14.The diagram below shows neural syanapsis,label a, b, c,d,e and f?

Score 3



15. A muscle cell viewed under microscope shows the following characters.
(Sarcolemma present, cylindrical shape, multinuclear, striations present)

Score 2

- Identify the type of muscle?
- Mention its function?

Prepared by Group-9

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|----------------|-----------------------------------|
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| 3.Beena V | CNPPMVHSS Kattachira |
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