

**Version- B****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. Name the Plasma protein which helps in Osmotic balance  
a) Platelets b)Albumin c)Fibrinogen d)Globulin
2. Name the tissue that act as pacemaker in human heart.
3. The gaps between two adjacent myelin sheaths are called.....
4. Note the relationship in the first pair and then complete the second pair.  
Lungs : Pleura  
Heart :.....
5. Expand  
a)ACTH b)MSH

**II. Answer any 9 questions from 6 to 16. Each carries 2 scores. (9×2=18)**

6. Arrange the correct sequential order of vertebrae in the vertebral column of human beings regions starting from the skull.

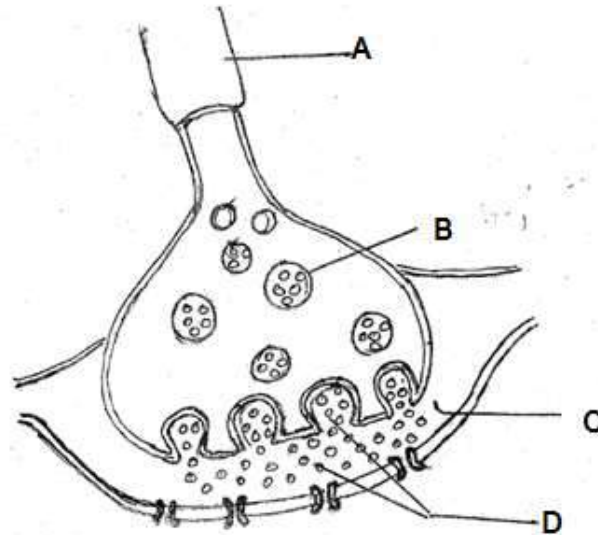
**Coccygeal, Sacral, Cervical , Thoracic , Lumbar**

7. Match the following

<b>Column A</b>	<b>Column B</b>
a)Monocytes	i)0.5-1%
b)Basophils	ii)20-25%
c)Neutrophils	iii)60-65%
d)Lymphocytes	iv)6-8%

8. Differentiate between  
a)Ammonotelism and Ureotelism  
b)Glycosuria from Ketonuria
9. Cells of the human body exhibit three main types of movements.  
a)Name the three types of movement  
b) The enzyme ATPase of the muscle is located on.....contractile protein

10. Observe the diagram and Label A, B, C and D



11. Give example(s) of:

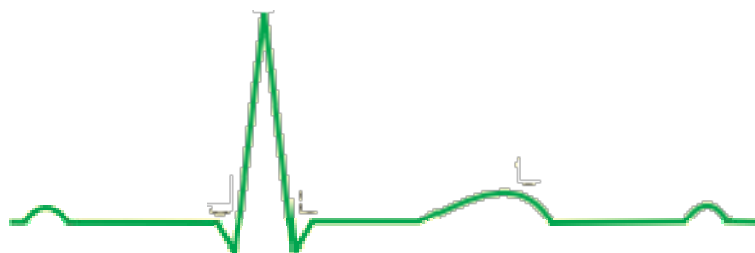
- a) Hyperglycemic hormone
- b) Hypercalcemic hormone
- c) Gonadotrophic hormones
- d) Androgens

12. Fill in the blanks appropriately

<u>Organ</u>	<u>Excretory wastes</u>
a) Kidneys	_____
b) Lungs	_____
c) Liver	_____
d) Skin	_____

13.a) Name the machine used to record electrocardiogram?

b) Re draw the following figure and label 3 waves



14. Name the following:

- a) Malfunctioning of kidneys can lead to accumulation of urea in blood, a condition called .....
- b) Name the ultimate method in the correction of acute renal failures
- c) Name the renal disease caused due to Stone or insoluble mass of crystallised salts (oxalates, etc.) formed within the kidney
- d) Inflammation of glomeruli of kidney is called

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

15. Hormones are non-nutrient chemicals which act as intercellular messengers and are produced in trace amounts.

- a) Write an example for amino acid derivative hormone.
- b) Name the hormone receptor mostly regulate gene expression or chromosome function by the interaction of hormone-receptor complex with the genome
- c) Name the glands which is absent in male and the one absent in female.

16.a) Name an important step in urine formation as it helps in the maintenance of ionic and acid base balance of body fluids

- b) Name the mechanism that allows for the production of concentrated urine
- c) Name the hormone that prevent diuresis

17. Fill in the blanks:

<u>Hormones</u>	<u>Target gland /Organ/Tissues</u>
(a) GnRH	_____
(b) Thyroid stimulating hormone	_____
(c) ACTH	_____
(d) Gonadotrophins	_____
(e) MSH	_____
(f) Prolactin (PRL)	_____

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