

THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2013**(UG-CCSS)****Zoology – Complementary Course****Z03 C05 PHYSIOLOGY, TOXICOLOGY AND ETHOLOGY****Time : Three Hours****Maximum 30 Weightage**

*(Answer may be written either in English or in Malayalam.
Give illustrations wherever necessary.)*

I. Answer all *twelve* questions. Each question carries $\frac{1}{4}$ weightage

A. Objective type question

1 The movement of molecules from an area of higher concentration to an area of lower concentration is called

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|------------------|-----------------|
| (a) Osmosis. | (b) Diffusion. |
| (c) Endocytosis. | (d) Exocytosis. |

2 Study of Animal behaviour is called

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|---------------|----------------|
| (a) Ecology. | (b) Hydrology. |
| (c) Cytology. | (d) Ethology. |

3 Site of Gas exchange in lungs are

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|------------------|-------------------------|
| (a) Trachioles. | (b) Alveoli. |
| (c) Bronchioles. | (d) Pulmonary Chambers. |

4 Mark the odd one

- | | |
|------------------|-------------------|
| (a) Monocytes. | (b) Lymphocytes. |
| (c) Neutrophils. | (d) Erythrocytes. |

B Match the following

- | | |
|----------------------------|---------------------|
| 5 Nissl granules | (a) Nephrocyte. |
| 6 Formation of RBC | (b) Neuron. |
| 7 Bowman's capsule | (c) Erythropoiesis. |
| 8 Junction between neurons | (d) Haemopoiesis. |
| | (e) Polycythemia. |
| | (f) Synapse. |

C Fill up the blanks :

- 9 The intravenous transfer of one person's blood to another person is called _____
- 10 The excretion of Nitrogenous wastes in the form of urea is called _____
- 11 Over secretion of somatotrophic hormones in adults leads to _____
- 12 Modification of a behaviour as a result of experience is called _____

(12 x $\frac{1}{4}$ = 3 weightage)

II. Short answer questions. Answer all *nine* questions :

- 13 What is Active transport ?
- 14 What is Thrombosis ?
- 15 Write briefly on any *two* Respiratory pigments.
- 16 What is ECG ?
- 17 What are Toxicants ? Give *two* examples.
- 18 Explain Cori cycle.
- 19 What is Action potential ?
- 20 What is Dialysis ?
- 21 Explain Motivation.

(9 x 1 = 9 weightage)

III. Short answer questions. Answer *five* questions :

- 22 Explain different types of Nitrogen excretion.
- 23 Describe different types of Learning.
- 24 Differentiate between Myogenic and Neurogenic hearts.
- 25 Comment on carbon monoxide poisoning.
- 26 Write an account on the types of Hearts.
- 27 Describe biochemical changes during Muscles contraction.
- 28 What is Habituation ?

(5 x 2 = 10 weightage)

IV. Essay questions. Answer any *two* questions

- 29 Write an essay on the transport of Carbon Dioxide.
- 30 Write an essay on the Social organization in Mammals.
- 31 Explain the mechanism of Nerve impulse transmission.

(2 x 4 = 8 Weightage)