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# SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2015

(CUCSS)

Zoology

### ZO 2C T04—PHYSIOLOGY

Time: Three Hours

Maximum: 36 Weightage

#### Part A

- I. Answer all questions :-
  - 1 What is the effect of carbon monooxide on oxygen binding of Hemoglobin?
  - 2 Write briefly on the physiology of micturition.
  - 3 Explain the digestion of proteins in the gastro-intestinal tract.
  - 4 What is Schizophrenia?
  - 5 Explain metabolic acidosis.
  - 6 Write a note on the structure of the eye ball.
  - 7 What is angina pectoris?
  - 8 Explain urea clearance and its importance.
  - 9 Describe a muscle spindle.
  - 10 Write briefly on the formation of lymph.
  - 11 What are the cardiac pace makers?
  - 12 What are the photoreceptors of the eye?
  - 13 What is acclimatization?
  - 14 Write a note on fetal haemoglobin.

 $(14 \times 1 = 14 \text{ weightage})$ 

### Part B

- II. Answer any seven of the following:-
  - 15 Write on cerebellum and its functions.
  - 16 Formation of image on retina.
  - 17 Define different pulmonary volumes.
  - 18 Describe the role of heart as a pump.
  - 19 Explain the role of thyroid and adrenals in temperature regulation.
  - 20 What is obesity? Explain the consequences. What is energy balance?

Turn over

- 21 Explain the mechano receptors and their stimulation.
- 22 Describe the physiology of olfaction.
- 23 Name a few neuro-transmitters and explain their action.
- 24 Describe the structural organisation of spinal cord.

 $(7 \times 2 = 14 \text{ weight})$ 

## Part C

- III. Answer any two of the following ::-
  - 25 Write on the taste buds and the transmission of nerve impulse to CNS.
  - 26 Explain the regulation of heart function.
  - 27 Describe the digestion of carbohydrates and lipids in the gastrointestinal tract.
  - Define renal clearance. Explain the urea and creatinine clearance test and their signific  $(2 \times 4 = 8)$  weight