

C 83636

(Pages : 2)

Name.....

Reg. No.....

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 monoxide 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 × 1 = 14 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 × 2 = 14 weightage)

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.
- 28 Define renal clearance. Explain the urea and creatinine clearance test and their significance.

(2 × 4 = 8 weightage)