



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 3rd Semester Examination, 2021-22

ZOOACOR06T-ZOOLOGY (CC6)

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

1. Answer any **eight** questions from the following: 2×8 = 16
 - (a) What are chondrocytes?
 - (b) How does epithelial tissue differ from connective tissue?
 - (c) What are glial cells? State their function.
 - (d) Differentiate between basal lamina and basement membrane.
 - (e) What is neuroendocrine gland? Give an example.
 - (f) What is fertilization cone?
 - (g) Distinguish between isometric and isotonic muscle contraction.
 - (h) What is rigor mortis?
 - (i) Distinguish between resting membrane potential and action potential.
 - (j) What happens when there is hyposecretion of ADH?
 - (k) What is transitional epithelium? Mention its location.
 - (l) State the sites of synthesis of prolactin and glucagon.

2. Answer any **three** questions from the following: 3×3 = 9
 - (a) What is the difference between myelinated and non-myelinated nerve fibres? Which one conducts nerve impulse faster and why? 1+2
 - (b) Mention role of calcium in muscle contraction. 3
 - (c) Comment on the capacitation of mammalian sperm. 3
 - (d) Mention the factors which affect neuromuscular transmission. What is “all or none law”? 2+1
 - (e) What is corpus luteum? Comment on its formation and degeneration. 1+2

3. Answer any **three** questions from the following: 5×3 = 15
 - (a) Discuss the first messenger and second messenger concept of hormone action. 5
 - (b) Distinguish between voluntary and involuntary muscle. Describe “Walk- Along” theory of contraction. 2+3
 - (c) State the function of sodium pump in action potential. Elucidate synaptic conduction of nerve impulse with suitable diagram. 1+4
 - (d) What do you mean by “spontaneous and induced ovulator”? Give a brief account of hormonal control of ovulation in mammals. 2+3
 - (e) Describe different types of stratified squamous epithelium with location and function. 3+2

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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