

**SH-III/Zoology-302C-6(T)/19**

**B.Sc. Semester III (Honours) Examination, 2018-19**

**ZOOLOGY**

**Course ID : 32612**

**Course Code : SHZOO-302C-6(T)**

**Course Title : T6-Animal Physiology : Controlling and Co-ordinating System**

**Time: 1 Hour 15 Minutes**

**Full Marks: 25**

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

1. Answer *any five* questions: 1×5=5
    - (a) Differentiate between neurohormone and neurotransmitter.
    - (b) What is signal amplification?
    - (c) What is Haversian canal?
    - (d) What do you mean by menarche and menopause.
    - (e) What is spermateleosis?
    - (f) Write down the name of one placental hormone and its function. ½+½=1
    - (g) State the function of Kinesin-I.
    - (h) What is pituicyte?
  
  2. Answer *any two* of the following: 5×2=10
    - (a) Briefly describe the role of Ca<sup>2+</sup> ion in muscle contraction with proper illustration. 4+1=5
    - (b) Briefly describe the mode of action of any steroid hormone. What is endemic Goiter? 4+1=5
    - (c) State the function of hormones secreted from the adrenal cortex.
    - (d) Describe and illustrate a typical bipolar neuron. 3+2=5
  
  3. Answer *any one* question: 10×1=10
    - (a) Briefly describe the fertilization procedure in mammals. What is dictyate arrest? 8+2=10
    - (b) "Nerve impulse propagation is unidirectional" — Justify the statement. Narrate the sliding filament model of muscle contraction. 5+5=10
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