

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

**PHYSIOLOGY**

**Course ID : 32513**

**Course Code : SHPHY-303C-7(T)**

**Course Title : Functions of the Nervous 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 from the following: 1×5=5
    - (a) What do you mean by lower motor neurone?
    - (b) What is referred pain?
    - (c) What is 'Golgi Tendon Reflex'?
    - (d) Differentiate between phasic stretch reflex and tonic stretch reflex.
    - (e) What is REM Sleep?
    - (f) Write the role of 'Broca's' area.
    - (g) What is 'Bell-Magendie Law'?
    - (h) Write any one role of ARAS.
  
  2. Answer *any two* questions from the following: 5×2=10
    - (a) What is pain? Briefly discuss the pain pathway? 1+4=5
    - (b) Briefly discuss the origin, course and termination of 'Gall and Burdach' tract. 1+3+1=5
    - (c) What is withdrawal reflex? Explain with diagramme the mechanism of stretch reflex. 1+(2+2)=5
    - (d) Discuss the role of hypothalamus on temperature regulation. 5
  
  3. Answer *any one* questions from the following: 10×1=10
    - (a) Why pyramidal tract is known as "Cortico Spinal tract" justify the statement? Discuss the origin, course and termination of Cortico spinal tract. 2+3+3+2=10
    - (b) Briefly discuss the origin, outflow and function of parasympathetic nervous system. Write in brief the functions of cerebral cortex. 2+3+2+3=10
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