

SH-V/ZOO-504/DSE-2/19

B.Sc. 5th Semester (Honours) Examination, 2019-20**ZOOLOGY****Course ID : 52617****Course Code : SH/ZOO-504/DSE-2**

Course Title: Biology of Insects

Time: 1 Hour 15 Minutes**Full Marks: 25***The figures in the right hand side margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Answer *any five* questions: 1×5=5
- Mention any two salient characters of class insecta.
 - Why are termites called social insects?
 - What do you mean by co-evolution?
 - State any two roles of insects in human welfare.
 - What kind of mouth parts is found in female mosquitoes?
 - What is ommatidium?
 - What do you mean by trophallaxis?
 - Define metamorphosis.
2. Answer *any two* questions: 5×2=10
- Describe the structure of the leg of an insect with labelled diagram. Mention one criterion for the selection of host plants by the phytophagous insects. 3+1+1=5
 - What is a vector? Name one disease caused by Dipteran vector and mention its control measures. 1+1+3=5
 - What is a termarium? Describe the composition of a termite colony mentioning the role played by each group members. 1+4=5
 - Write short notes (*any two*): 2½+2½=5
 - Structure of photoreceptors in insects
 - Role of allelochemicals in host plant mediation
 - Types of antennae in insects
3. Answer *any one* of the following: 10×1=10
- Classify insects upto subclass with characters mentioning at least one example from each. Name two wingless insects (scientific name). 6+2+2=10
 - Elaborate the structure and physiology of the reproductive or circulatory system of an insect with neat labelled diagram(s). 4+4+2=10
-