



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI - ABUJA**  
**FACULTY OF SCIENCE**  
**Department of Pure and Applied Sciences**  
**2021\_2 EXAMINATION**

**COURSE CODE: BIO407**

**COURSE TITLE: BASIC ENTOMOLOGY**

**CREDIT: 2 UNITS**

**TIME ALLOWED: 2 HOURS**

**INSTRUCTION: ANSWER NUMBER ONE (1) AND ANY OTHER THREE (3) QUESTIONS**

- Q1 a. List any five families in the order Diptera. 5marks  
b. Itemize the distinguishing characteristics of Bristle tails. 6marks  
c. Outline any six characteristics of the largest order in the animal kingdom. 6marks  
d. Give a comprehensive description of the four divisions of foregut of insects 8marks
- Q2 a. List the sites of hormones responsible for controlling moulting and metamorphosis. 3marks  
b. Outline the six families of the order Diptera and give an example of each family. 6marks  
c. State six characteristics of polypod larva. 6marks
- Q3 a. What are the economic importance of the families Vespodea and Apoidea? 3marks  
b. Enumerate the three distinct tagmata in Insects. 3marks  
c. Give an insight into the evolution of insects. 9marks
- Q4 a. Name the three groups of insects based on metamorphosis. 3marks  
b. Enumerate four characteristics of spring tails. 4marks  
c. With appropriate example, outline eight different types of insects' legs that are modified for different modes of movement 8marks
- Q5 a. Provide any seven external characteristics of cockroach. 7marks  
b. Write short notes on the following groups of termites:  
i. workers 4marks  
ii. soldiers. 4marks