Practice Set
End Semester (2nd Semester) Examination, May, 2026

Program: B. Sc. (Hons.) Agriculture
Subject: Fundamentals of Entomology
Subject Code: ENTO-121

Course Outcomes: At the end of the course, the student will be able to:
CO1: Learn about phylum arthropoda.

CO2: Understand morphology and anatomy of insect.

CO3: Comprehend effect and functions of various biotic and abiotic factors.

CO4: Identify agriculturally important insect's orders and families.

Unit / Module-1

Section: I (5 Marks questions, only Lower order Thinking -LOT)

Sl. No.	Questions	Bloom Taxonomy	CO
1.	Describe five important historical events of Entomology in India.	Remember	CO1
2.	List and explain the major factors responsible for the dominance of insects in the animal kingdom.	Remember	CO1
3.	Classify the phylum Arthropoda up to the level of classes with suitable examples.	Understand	CO1
4.	State the distinguishing features of Class Insecta and briefly compare it with any two other classes of Arthropoda.	Remember	CO1
5.	Explain the relationship of Class Insecta with other classes of Arthropoda based on general morphological characteristics.	Understand	CO1

Section: II (10 Marks questions, HOT)

Sl. No.	Model Questions	Bloom Taxonomy	CO
6.	Illustrate the history and development of Entomology in India, highlighting major contributions and milestones.	Apply	CO1

7.	Analyze how structural and physiological adaptations have contributed to the evolutionary success of insects in diverse habitats. Support your answer with examples.	Analyze	CO1
8.	Evaluate the classification of Phylum Arthropoda up to class level. Do you think this classification effectively represents evolutionary relationships? Justify your answer with examples.	Evaluate	CO1
9.	Compare Class Insecta with other major classes of Arthropoda (such as Arachnida, Crustacea, Diplopoda and Chilopoda) based on morphological and physiological features.	Analyze	CO1
10.	Design a comparative framework (table/diagram) to demonstrate the relationship of Class Insecta with other arthropod classes based on structure, development, and adaptation.	Create	CO1

Unit / Module-2

Section: I (5 Marks questions, only Lower order Thinking -LOT)

Sl. No.	Model Questions	Bloom Taxonomy	CO
11.	Explain the structure and functions of the insect cuticle.	Understand	CO2
12.	Enlist the sclerites of head with a proper diagram.	Remember	CO2
13.	Illustrate insect metamorphosis and its types.	Understand	CO2
14.	Mention the different types of reproduction in insects along with suitable examples.	Remember	CO2
15.	Discuss the role of Malpighian tubule in insect excretory system.	Understand	CO2

Section: II (10 Marks questions, HOT)

Sl. No.	Model Questions	Bloom Taxonomy	CO
16.	Categorize insect respiratory system based on number and location of functional spiracles with suitable examples.	Analyze	CO2
17.	Design an insect wing structure based on wing venation, wing margin, wing angle and explain briefly.	Create	CO2
18.	Construct a detailed and well-labeled diagram of the insect digestive and reproductive systems, integrating functional	Analyze	CO2

	explanations for each part.		
19.	Analyze how modifications of insect antennae contribute to their ecological success.	Analyze	CO2
20.	Design a flowchart illustrating the different steps involved in moulting along with diagrams, highlighting the role of hormones at each stage.	Create	CO2

Unit / Module-3

Section: I (5 Marks questions, only Lower order Thinking -LOT)

Sl. No.	Model Questions	Bloom Taxonomy	CO
21.	Describe the components of the environment affecting insects.	Remember	CO3
22.	Mention different kinds of insect symbiosis along with examples.	Remember	CO3
23.	Compare dispersal and dispersion.	Understand	CO3
24.	Explain effect of light on insect population.	Understand	CO3
25.	Briefly discuss the biotic potential and environmental resistance.	Understand	CO3

Section: II (10 Marks questions, HOT)

Sl. No.	Model Questions	Bloom Taxonomy	CO
26.	Analyze the combined effects of abiotic factors (temperature, humidity, light) on insect distribution and abundance.	Analyze	CO3
27.	Develop a detailed classification chart of insects based on their food requirements, incorporating examples and explaining their ecological and economic significance.	Create	CO3
28.	Illustrate any five key terms related to insect ecology and explain their significance in understanding insect–environment interactions.	Apply	CO3
29.	Evaluate different types of interspecific competition between insects.	Evaluate	CO3
30.	Analyze various factors influencing insect behavior related to	Create	CO3

	relative humidity (moisture). Describe the term mortality and natality with respect to insects.		

Unit / Module-4

Section: I (5 Marks questions, only Lower order Thinking -LOT)

Sl. No.	Model Questions	Bloom Taxonomy	CO
31.	Explain taxonomy and its types.	Understand	CO4
32.	Define biotypes. Discuss binomial nomenclature of insects.	Understand	CO4
33.	Illustrate characteristics of Isoptera insect order.	Apply	CO4
34.	State the taxonomical characteristics of Cicadellidae family of Hemiptera order along with example.	Remember	CO4
35.	Discuss the taxonomical characteristics of Thripidae family of Thysanoptera order along with example.	Remember	CO4

Section: II (10 Marks questions, HOT)

Sl. No.	Model Questions	Bloom Taxonomy	CO
36.	Categorize insects up to orders based on Imms classification. Give examples under each insect order.	Analyze	CO4
37.	Justify the importance of Hymenoptera Insect Order by mentioning important characteristics of any five families of the Order.	Evaluate	CO4
38.	Evaluate the taxonomic classification of Order Diptera up to family level. How effective are morphological characters in differentiating families? Support your answer with examples.	Evaluate	CO4
39.	Construct a comparative chart highlighting the key characteristics of Order Orthoptera and its major families, including examples and distinguishing features.	Create	CO4
40.	Apply your knowledge of insect taxonomy to identify whether a given specimen is a moth or butterfly, and a beetle or weevil, based on observable characteristics.	Apply	CO4

SUMMARY SHEET:

CO WISE

CO	Question No.	Marks
CO1	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	75
CO2	11, 12, 13, 14, 15, 16, 17, 18, 19, 20	75
CO3	21, 22, 23, 24, 25, 26, 27, 28, 29, 30	75
CO4	31, 32, 33, 34, 35, 36, 37, 38, 39, 40	75
TOTAL		**300**

UNIT WISE

CO	Question No.	Marks
UNIT1	1-10	75
UNIT2	11-20	75
UNIT3	21-30	75
UNIT4	31-40	75
TOTAL		**300**

BLOOM'S Taxonomy Level (BTL) WISE

BTL	Question. No.	Marks
LOT	1, 2, 3, 4, 5, 11, 12, 13, 14, 15, 21, 22, 23, 24, 25, 31, 32, 33, 34, 35,	100
HOT	6, 7, 8, 9, 10, 16, 17, 18, 19,20, 26, 27, 28, 29, 30, 36, 37, 38, 39, 40	200
TOTAL		**300**

Prepared By: Dr. Sourav Sen **Reviewed By: Dr. Neha G. A. Kisku**

Disclaimer: This is a practice set. The questions in end term examination may differ from the practice set. The practice set is meant for practice only.