

No. of Printed Pages : 4

MZOE-004

M. Sc. (ZOOLOGY)

(MSCZOO)

Term-End Examination

June, 2026

MZOE-004 : INSECT TAXONOMY AND

MORPHOLOGY

Time : 2 Hours

Maximum Marks : 50

Note : *Attempt any **five** questions. All questions carry equal marks.*

-
1. Explain the role of hormones involved in moulting and metamorphosis. 10
 2. Differentiate between the following pairs of words : 10
 - (a) Exopterygota and Endopterygota

- (b) Hypognathous and Opisthognathous head
 - (c) Piercing-sucking and sponging type of mouthparts
 - (d) Simple and Compound eye
3. (a) Describe briefly about abdominal appendages. 5
- (b) Discuss the main function of mechanoreceptors. 5
4. Write short notes on any *two* of the following :
- 2×5=10
- (a) Heteromorphosis
 - (b) Polyphenism in aphids
 - (c) Diapause

5. (a) Diagrammatically explain the general structure of insect integument. 5
- (b) Explain the role of accessory glands in sperm transfer and reproductive success in male insects. 5
6. (a) Explain the mechanism and structural adaptations in aquatic insects for locomotion. 5
- (b) Describe the role of accessory glands in female reproductive system of insects. 5
7. (a) Give *one* example of each of the following insect orders : 5
- (i) Phasmida
- (ii) Orthoptera
- (iii) Lepidoptera
- (iv) Hemiptera
- (v) Odonata

- (b) Write important characteristics of order
Diptera *or* order Thysanoptera. 5
8. (a) Write important characteristics of
Apterygota. 5
- (b) Briefly explain about Ross theory of
insect evolution. 5

× × × × ×