

B.Sc. (Part—I) Semester—I Examination

APICULTURE

(Fundamentals of Beekeeping)

Time : Three Hours]

[Maximum Marks : 80

N.B. :— (1) ALL questions are compulsory.

(2) Question Nos. 2 to 7 carry equal marks.

1. (A) Fill in the blanks :—

- (a) Comb foundation sheet is made up of _____. ½
- (b) _____ is Italian honey bee species. ½
- (c) House of honey bee colony provided for beekeeping is bee _____. ½
- (d) _____ is main function of queen bee. ½

(B) Choose correct option :—

- (e) *A. florea* is called : ½
- (i) Dammer bee (ii) Dwarf bee (iii) Rock bee
- (f) Number of frames present in hive of *A. melifera* : ½
- (i) 7 (ii) 10 (iii) 12
- (g) Which of the following is not bee product ? ½
- (i) Honey (ii) Wax (iii) Jelly
- (h) The species used in honey bee keeping : ½
- (i) *A. florea* (ii) *A. cerena* (iii) *A. dorsata*

- (C) Answer in **ONE** sentence each :—
- (i) Which are honey bee products ? 1
 - (j) What is the food of honey bee ? 1
 - (k) How many queens are present in a single functional colony ? 1
 - (l) Which are casts in bee colony ? 1
2. (a) With the help of suitable example explain bee plants. 4
- (b) Give identifying characters of *A. cerena*. 4
- (c) Define beekeeping and give its advantages. 4
- OR**
- (d) Explain identifying characters of *A. dorsata*. 4
- (e) Describe use of hive tool and smokes. 4
- (f) Give basic requirement for honey bee keeping. 4
3. (a) What is migration of bee colonies ? Explain its need. 4
- (b) Describe cultivated crops that are useful for beekeeping. 4
- (c) Explain various benefits from hived bee colony. 4
- OR**
- (d) Explain various cultivated crops sown in Melghat region that are useful for beekeeping. 4
- (e) Explain how beekeeping is beneficial for tribal people. 4
- (f) What is migration route ? Describe benefits of migration. 4
4. (a) With the help of diagram explain wax extraction process. 6
- (b) Describe various components of bee hive in brief. 6
- OR**
- (c) With the help of diagram explain honey extractor. 6
- (d) What is feeding ? Explain smoker and advantages of bee veil. 6

5. (a) Explain characteristics of queen bee. 4
(b) Describe queen cell. 4
(c) Explain laying workers. 4

OR

- (d) Explain the concept of foraging and mention routine activity in bee colony. 4
(e) What is uniting ? Give its advantages. 4
(f) What is drone ? Explain its role in colony. 4
6. Discuss criteria, site selection for Apiary. 12

OR

- Discuss required climatic conditions, flora and its range for Apiary. 12
7. (a) Give advantages of maintaining colony record. 4
(b) Explain strength of colony. 4
(c) Give mechanism of food storage in bee colony. 4

OR

- (d) What is pollen ? How pollen income is calculated ? 4
(e) How you can maximize honey yield ? 4
(f) Explain mechanism of maintaining colony record. 4

