

**B.Sc. (Part—I) Semester-I Examination**

**APICULTURE**

**(Fundamentals of Beekeeping)**

Time : Three Hours]

[Maximum Marks : 80

- Note :—** (1) All questions are compulsory.  
(2) Question Nos. 2 to 7 carry equal marks.

1. (A) Fill in the blanks :— 2
- (i) Place where hives are arranged for beekeeping is known as \_\_\_\_\_ .
  - (ii) Haploid eggs of honeybees hatch into \_\_\_\_\_ .
  - (iii) *Apis florea* is called \_\_\_\_\_ bee.
  - (iv) Commercial beekeeping was started by \_\_\_\_\_ .
- (B) Choose correct alternative : 2
- (v) After three days, worker larvae are fed on \_\_\_\_\_ .
    - (a) Royal jelly (b) Bee bread
    - (c) Honey (d) Wax
  - (vi) The comb of *Trigona* is made up of \_\_\_\_\_ .
    - (a) honey (b) cerumen
    - (c) lac (d) all of these
  - (vii) Which of the following is not a caste of honeybees ?
    - (a) Queen (b) Nasute soldiers
    - (c) Drone (d) Worker
  - (viii) Barrel hive is \_\_\_\_\_ .
    - (a) primitive hive (b) modern hive
    - (c) fix hive (d) none of these

- (C) Answer in one sentence :— 4
- (ix) Give the name of stingless bee.
  - (x) How many mature queens are present in a single functional colony ?
  - (xi) What is the main function of drone in a hive ?
  - (xii) What is migration of honeybees ?

2. Describe the following :— 12
- (a) Identifying features of *Apis trigona*.
  - (b) Bee products.
  - (c) Beekeeping and its advantages.

OR

- (d) Identifying features of *Apis cerana*
- (e) Varieties of *Apis mellifera*.
- (f) Use of hive tools and smokes.

3. Explain the following :— 12
- (g) Seasonal factors during migration of colony
  - (h) Information of cultivated bee flora in Melghat
  - (i) Needs for migration of colony.

OR

- (j) Loading of bee hives during migration.
- (k) Benefits of hived bee colony.
- (l) Significance of beekeeping in lives of tribals.

4. Describe in detail Langstroth's hive and wax extraction process. 12

OR

Explain in detail importance of comb foundation sheet and honey extraction equipment.

5. Attempt the following :—
- (m) Queen cell.
  - (n) Cleaning activity of workers.
  - (o) Laying worker. 12

OR

- (p) Artificial feeding.
  - (q) Drone breeding.
  - (r) Cleaning activity of workers.
6. Describe the resources and favourable factors for beekeeping. 12

**OR**

Discuss various factors that should be considered during site selection of Apiary.

7. Describe the following :— 12
- (s) Objectives of colony inspection.
  - (t) Brood condition.
  - (u) Mechanism of food storage in bee colony.

**OR**

- (v) Ways to maximize honey yield.
- (w) Strength of colony.
- (x) Mechanism of maintaining colony record.

