

AP-413

7. (s) How will you decide strength of colony? 4
 (t) How will you calculate pollen income? 4
 (u) Explain brood comb structure. 4

OR

- (v) How the bees will carry pollen and nectar? 4
 (w) Give characteristics of strong colony. 4
 (x) Explain honey flow season. 4

B.Sc. (Part-I) Semester-I Examination**APICULTURE****(Fundamentals of Bee Keeping)**

Time—Three Hours]

[Maximum Marks—80

Note : ALL questions are compulsory and question Nos.2-7 carries equal marks.

1. (A) Fill in the blanks :

(a) Bees collect _____ and _____ from flowers. $\frac{1}{2}$

(b) Wax extractor is used for extraction of _____. $\frac{1}{2}$

(c) Brood chamber is the important component of _____. $\frac{1}{2}$

(d) _____ is formed in queen cell. $\frac{1}{2}$

(B) Choose the correct option :

(a) Apis floria bees are :
 (cavity nesting, open nesting, nesting). $\frac{1}{2}$

(b) Smallest bee in bee colony is :
 (queen, worker, drone) $\frac{1}{2}$

- (c) Honey bees constructs the comb of -
(wax, propolis, resin). ½
- (d) Queen gate is required only to hive of -
(A. cerena, A. dorsata, A. melifera). ½

(C) Answer in **one** sentence each.

- (a) Define bee flora. 1
- (b) What is royal jelly? 1
- (c) Define pollen income. 1
- (d) What is propolis? 1

2. Explain in detail about fundamental requirement for bee keeping. 12

OR

Discuss Apis dorsata and Apis cerena bees and their colonies. 12

3. Discuss which points to be considered during migration of bee colonies. 12

OR

What do you understand by cultivated bee crops? Explain various cultivated bee crops with reference to Maharashtra. 12

4. (a) Explain significance of longstroth hive. 4
- (b) Describe super or honey chamber. 4
- (c) Explain use of pollen trap and queen gate. 4

OR

- (d) Explain advantages of comb foundation sheet. 4
- (e) What is the role of frames in bee hives? 4
- (f) Explain basic difference between ISl and longstroth hive. 4

5. (g) Explain any four identifying characteristics of queen bee. 4
- (h) Describe brood comb. 4
- (i) Explain uniting of colonies. 4

OR

- (j) When queen cell can be prepared by the workers? 4
- (k) For what purpose the workers takes flight? 4
- (l) Explain egg laying behaviour of queen bee. 4
6. (m) Explain climatic conditions required for apiary site. 4
- (n) Describe foraging range of A.cerena and A.melifera. 4
- (o) How bee store the food stock in the hive explain? 4

OR

- (p) How optimum numbers of hives to be decided in restricted availability of bee flora? 4
- (q) Explain criteria for selection of site for apiary. 4
- (r) What type of topography will be suitable for apiary? 4