

B.Sc. (Part-II) Semester-IV Examination
APICULTURE
(Bee Chemistry)

Time : Three Hours]

[Maximum Marks : 80

Note :- All questions are compulsory and questions 2-7 carry equal marks.

1. (A) Fill in the blanks :
- | | |
|---|---|
| (1) Bee pollen collected from _____ . | ½ |
| (2) _____ is the bi product of honey bee. | ½ |
| (3) _____ is the property of honey. | ½ |
| (4) Honey from mixed Flora is _____ . | ½ |
- (B) Choose appropriate answer :
- | | |
|--|---|
| (1) Honey quality standards are fixed by _____ . | ½ |
| (a) Agmark (b) Market (c) IUCN | |
| (2) _____ is the important constituent of honey. | ½ |
| (a) Glucose (b) Water (c) Granule | |
| (3) _____ is one of the raw material of honey. | ½ |
| (a) Pollen (b) sucrose (c) nectar | |
| (4) _____ is the type of honey. | ½ |
| (a) Unifloral (b) Solid honey (c) Artificial honey | |
- (C) Answer in one sentence :
- | | |
|-------------------------------------|---|
| (1) Define mature honey. | 1 |
| (2) Define multifloral honey. | 1 |
| (3) Define apiary honey. | 1 |
| (4) Define hygroscopicity of honey. | 1 |
2. Describe chemical composition of nectar and how nectar converted into honey. 12
- OR**
- Discuss mature and immature honey. Which are the major components of honey? 12
3. Explain in brief :
- | | |
|--|---|
| (a) Unifloral honey and its significance | 4 |
| (b) Compositional variations of honey | 4 |
| (c) Apiary honey. | 4 |

OR

(d) Properties of honey (any two)	4
(e) Multifloral honey	4
(f) Environmental factors and its effects on honey composition.	4
4. Describe various properties of honey in detail.	12
OR	
Discuss the Quality standards of honey.	12
5. Explain in brief :	
(g) BIS specifications of honey.	4
(h) Industrial uses of honey.	4
(i) Bleaching of bees wax.	4
OR	
(j) Chemical composition of wax.	4
(k) Domestic uses of honey.	4
(l) Extraction of bees wax.	4
6. Explain in brief :	
(m) Method of pollen collection.	4
(n) Applications of bee venom.	4
(o) Method of bee venom collection.	4
OR	
(p) Chemical composition of bee venom.	4
(q) Uses of bee pollen.	4
(r) Principles of bee venom secretion.	4
7. Describe in brief :	
(s) Royal jelly origin.	4
(t) Propolis	4
(u) Royal jelly composition.	4
OR	
(v) Properties of Royal jelly.	4
(w) Applications of propolis.	4
(x) Royal jelly preservation methods.	4