

(6 pages)

Reg. No. :

Code No. : 11578 E Sub. Code : JMZO 5 D

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

Fifth Semester

Zoology

Elective II — APICULTURE

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer:

1. How many queens usually live in a bee colony?

- (a) 1 (b) 2
(c) 3 (d) 4

2. How many days does the egg stage last in Honey bee?

- (a) 2 (b) 3
(c) 4 (d) 5

3. How many wings does a bee have?

- (a) 2 (b) 3
(c) 4 (d) 5

4. How does the bee carry the pollen back to its colony?

- (a) In its body
(b) On its front legs
(c) On its middle legs
(d) On its rear legs

5. Which organ prevents the nectar collected, being passed through into the bee's digestive system in order that it can be regurgitated back at the hive?

- (a) Honey bladder
(b) Gut
(c) Proventriculus valve
(d) Gullet

6. What colour is the bee's blood?

- (a) Red (b) White
(c) Clear (d) Black

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7. What does pollen consist of mainly?

- (a) Carbohydrates
- (b) Protein
- (c) Fat
- (d) None of the three

8. How long does a worker bee live in the summer?

- (a) about 2 weeks
- (b) about 2 months
- (c) about 4 months
- (d) about 6 months

9. What is varroa?

- (a) a fungus (b) a bacterium
- (c) an insect (d) an arachnid mite

10. Where are the most varroa usually found?

- (a) in the cells of developing workers
- (b) in the cells of developing queens
- (c) in the cells of developing drones
- (d) on the adult bee

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PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) What is the importance of bee keeping?

Or

(b) Write down the classification of Apis species.

12. (a) What are the characteristics of a queen bee?

Or

(b) Mention important features of drone bees.

13. (a) Discuss the process of production of honey through old method.

Or

(b) What are the main products from an apiary?

14. (a) List the uses of bee-wax.

Or

(b) Write the importance of royal jelly.

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15. (a) How many queen bee, drone bee and worker bee in a colony?

Or

- (b) Explain honey comb.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Write an essay on members in a bee colony.

Or

- (b) With a neat sketch, describe the features of queen bee.

17. (a) With neat diagram, describe the structure of bee comb.

Or

- (b) Write short notes on the following :

- (i) Rock bee
- (ii) Little bee
- (iii) Asian bee hive.

18. (a) Give an account on distinctive features of honeybee species found in India.

Or

- (b) Write the principle types and working mechanism of honey extractor.

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19. (a) Give an account on various types of equipment for handling the bees in beekeeping industry.

Or

- (b) How do you identify the European Foul Brood diseased honeybees?

20. (a) Give an account on the enemies of bees and their control measures.

Or

- (b) Explain about the diseases or honeybee.

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