

(6 pages)

Reg. No. : .....

Code No. : 20599 E Sub. Code : CNZO 31

U.G. (CBCS) DEGREE EXAMINATION, APRIL, 2024.

Third Semester

Zoology

Non Major Elective - BEE KEEPING

(For those who joined in July 2021 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Indian bees are native to \_\_\_\_\_. This species is used for the commercial production of honey and other substances.  
(a) India or Africa  
(b) India or China  
(c) India or Japan  
(d) None of the above

2. A \_\_\_\_\_ is typically an adult, female that leads a colony  
(a) queen bee (b) worker bee  
(c) drone bee (d) all the above
3. Honey is formed from nectar collected by bees from the \_\_\_\_\_  
(a) leaves (b) stem  
(c) flowers (d) all the above
4. Colonies of honey bees migrate during \_\_\_\_\_ season.  
(a) pre monsoon (b) monsoon  
(c) post monsoon (d) none of the above
5. Bee colonies can be captured from natural sources. Before bagging the colony, \_\_\_\_\_ should be applied  
(a) fire (b) smoke  
(c) water (d) all the above
6. The most common predators faced by honey bees are \_\_\_\_\_  
(a) skunks (b) bears  
(c) hive beetles (d) all the above

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7. A \_\_\_\_\_ is a single-story frameless beehive in which the comb hangs from removable bars  
(a) top-bar hive  
(b) low-bar hive  
(c) artificial hive  
(d) all the above
8. Beekeepers use smokers to \_\_\_\_\_ the honey bees by puffing cool smoke at the entrance of the beehive and at top of the frames  
(a) harm to bees  
(b) calm  
(c) irritate  
(d) all the above
9. Most bacteria and other microbes cannot grow or reproduce in \_\_\_\_\_  
(a) honey wings (b) honey comb  
(c) honey legs (d) honey
10. \_\_\_\_\_ is a product made from the honeycomb of the honeybee  
(a) Beeswax (b) Bees waste  
(c) Beeswax oils (d) All the above

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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) Explain different types of honey bee.  
Or  
(b) What is the role of a worker in a bee colony?
12. (a) Give the relationship between a bee and a plant.  
Or  
(b) What are the requirements to consider for bee keeping?
13. (a) What care should be taken to purchase honey bee colonies?  
Or  
(b) What are the most common diseases of bees?
14. (a) Why is the Langstroth the most commonly using hive?  
Or  
(b) What is the difference between modern and traditional hive?

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15. (a) Describe the different methods of extracting honey.

Or

(b) What is royal jelly? Is it the same as honey?

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Explain the life cycle of a queen bee.

Or

(b) Describe the various role of worker bee.

17. (a) Discuss about the season which is best for beekeeping.

Or

(b) How do you transfer the bees? What is the best time to move a beehive?

18. (a) What are the parts of a modern bee hive?

Or

(b) How do you protect a bee colony?

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19. (a) How to you set up a apiary?

Or

(b) Write a detailed account on disease management in Apiary.

20. (a) What are the chemical and physical properties of honey?

Or

(b) Write a detailed account on preservation of honey? How long can you preserve honey?

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