Reg.	No.	 ****	 ***	***	 	
Vame						



Sixth Semester B.Sc. Degree Examination, March 2021

First Degree Programme under CBCSS

Zoology

Elective Course

ZO 1661.1: ECONOMIC ZOOLOGY - VERMICULTURE AND APICULTURE

(2015 - 2017 Admissions)

Time: 3 Hours

Max. Marks: 80

SECTION - A

(Answer the following questions (in one or two sentences. 1 mark each)

- 1. Drone
- 2. Cocoon
- 3. Super chamber
- 4. Epigeic
- 5. Bee venom
- 6. Melipona irridipennis
- 7. Royal jelly
- 8. Hive tool
- 9. Biofertilizer
- 10. Any two enemies of bee.

 $(10 \times 1 = 10 \text{ Marks})$

SECTION - B

Answer any eight of the following. (not to exceed one paragraph. Each carries 2 marks)

- 11. Swarming
- 12. Dearth period
- 13. Pollen basket
- 14. Species of earthworms in vermicomposting
- 15. Mouthparts of honey bee
- 16. Chemical composition of honey
- 17. Clitellum
- 18. (a) Eye brush
 - (b) Bee brush
- 19. Earthworms and nitrogen transformation.
- 20. Beeveil
- 21. Environmental requirements in vermicomposting.
- 22. Honey flowperiod.

 $(8 \times 2 = 16 \text{ Marks})$

SECTION - C

Answer any six of the following (not to exceed 120 words. Each carries 4 marks)

- 23. Explain the communication in honeybees.
- 24. Comment on the nature and habits of earthworms.

- 25. Explain the different species of honey bees.
- 26. Comment on Eisenia foetida.
- 27. Describe the structure of bee box.
- 28. Explain the significance of vermi-remediation.
- 29. Comment on the uses of bees wax.
- 30. Explain the advantages of vermicomposting.
- 31. Add a note on extraction of honey from the comb and processing.

 $(6 \times 4 = 24 \text{ Marks})$

SECTION - D

Answer any two of the following (each carries 15 marks)

- 32. Write an essay on bee keeping methods and equipments.
- 33. Explain the various steps in vermicomposting. Add a note on maintenance, harvesting and storage of vermicompost.
- 34. Describe the various pests, diseases and remedies of honey bees.
- 35. Explain the lifecycle of earthworms. Describe their role in the management of solid wastes.

 $(2 \times 15 = 30 \text{ Marks})$