Reg. No. : .....

Name : .....

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C – 1394

Sixth Semester B.Sc. Degree Examination, April 2017
First Degree Programme under CBCSS
Elective Course
ZO 1661.1 : ECONOMIC ZOOLOGY – VERMICULTURE AND APICULTURE
(For 2013 and 2014 Admission)

Time : 3 Hours

Max. Marks : 80

I. Answer **all** questions (**1** mark **each**) :

1) What is apiary ?
2) What is endogeic earthworm ?
3) What is vermiwash ?
4) What is Royal jelly ?
5) Explain swarming in honey bees.
6) What is propolis ?
7) What is meant by dearth period ?
8) What is the significant of vermicast ?
9) Name two brood disease of honey bee.
10) What is the role of pollen basket ?

(10x1=10 Marks)

II. Answer **any eight** questions (**2** marks **each**) :

11) Comment on the use of vermicompost as biofertilizers.
12) List out the functions of worker bee.
13) Write a short account on vermi-remediation.
14) Write an account on exotic species of earthworms used in vermicomposting.
15) What are the uses of bee venom ?
16) List out the economic importance of bee wax.
17) Write a brief note on little bee.
18) What do you mean by Bee Pasturage ?

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19) What are the chemical parameters of vermicast ?

20) What is the role of clitellum of earthworm ?

21) Write the principle of honey extractor.

22) Write a short note on queen excluder.

(8×2=16 Marks)

III. Answer **any six** questions (**4** marks **each**) :

23) Write an account on the equipments for bee keeping.

24) What is waggle dance ? List its significance in honey bee communication.

25) What are the physical effects of earthworm on soil ?

26) Write a note on social behavior in worker honey bee.

27) Write short note on various diseases of honey bees ?

28) Describe the structure of sting apparatus of honey bee.

29) What are the desirable features of a earthworm species used for vermicomposting ?

30) Explain the economic aspects of vermiculture.

31) Classify earthworm based on ecological strategies and feeding habits.

(6×4=24 Marks)

IV. Answer **any two** of the following (**15** marks **each**) :

32) Describe the methodology adopted in vermicomposting. Add a note on advantages of vermicompost.

33) Comment on the species of honey bees used in apiculture. List the adaptations of different casts of bees.

34) Explain various bee keeping methods and equipments in apiary management and maintenance. Add a note on diseases of honey bee.

35) Write an essay on nature and species of earthworms used in vermiculture. List the identification features of four species based on morphological characters.

(2×15=30 Marks)

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