

**B.Sc. Semester-III Examination, 2022-23****ZOOLOGY [Honours]**

Course ID : 32615 Course Code : SH/ZOO/305/SEC-1

Course Title : Apiculture

Time : 2 Hours

Full Marks : 40

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.***UNIT-I**1. Answer any **five** of the following questions:

2×5=10

- What is waggle dance?
- What do you mean by nuptial flight?
- Name two diseases and its causal organism of honeybee.
- Mention the life span of a queen and worker bee.
- What is Propolis?
- Mention the components of honey.
- Write the disadvantages of indigenous honey extraction method.
- In which part of the body in honey bee, pollen basket is found?

*[Turn Over]***UNIT-II**2. Answer any **four** of the following questions:

5×4=20

- Describe the use of bee wax. What do you mean by bee forage? 3+2=5
- What are brood cells? Describe the different chambers of a honey comb. 2+3=5
- Name the hormone secreted by the queen honey bee. What are the functions of worker bee? 1+4=5
- Discuss the social behavior of honey bee. 5
- Write the advantages and disadvantages of bee keeping.  $2\frac{1}{2} + 2\frac{1}{2} = 5$
- What is the significance of round and wag-tail dances in bee communication? 5

**UNIT-III**3. Answer any **one** of the following questions:

10×1=10

- What are the different pathogenic diseases of honey bee? Describe four such diseases with pathogen name, symptoms and control measures. 2+8=10
- What is the economic importance of apiculture? Describe the Langstroth bee box with proper diagram. 4+6=10