



## SECTION-B

2. Define systematics. Give objectives of insect classification. How systematics does differ from taxonomy, classification and identification?
3. Describe the process of cuticle expansion and the hormones involved in cuticle production. What are functions of insect cuticle?
4. Explain various modifications of insect mouth parts giving one example.
5. Define metamorphosis. Based on the extent of changes in metamorphosis, how the insects are classified?
6. Describe female reproductive organs in insects. How many types of ovarioles are found in insects?

## SECTION-C

7. What are wing modifications in insects? Giving short note on wing coupling and its significance, describe various types of wing coupling mechanisms in insects.
8. Draw morphological insect body structure which might be closest to the generalized form, i.e. a grasshopper. Also give a schematic section of typical insect integument, showing the various layers.
9. Give brief about insect sensory system. What are the methods for detecting chemical stimuli in insects and how temperature and humidity are perceived in insects?

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**