# 0127

Total No. of Questions - **26** Total No. of Printed Pages - **2** 

Regd.					
No.					

## Part - III BOTANY, Paper - I

## (English Version)

## MODEL QUESTION PAPER (FOR IPE 2020-21 ONLY)

## Time : 3 Hours

## Max. Marks : 60

Section - A

#### $10 \times 2 = 20$

#### Answer ALL the questions (very short answer type)

- 1. What does ICBN stand for?
- 2. State two economically important uses of heterotrophic bacteria.
- 3. Why is Mendel considered as the father of Genetic?
- 4. Why are bryophytes called the amphibians of the plant kingdom?
- 5. Define placentation. What type of placentation is found in Dianthus?
- 6. What is Omega Taxonomy?
- 7. Write the floral formula of solanam plant.
- 8. What is middle lamella made of ? What is its functional significance?
- 9. Give one example for each of amino acids, sugars, nucleotides and fatty acids.
- 10. Define population and community.

### Section - B 4×6=24

#### Answer any SIX questions (short answer type)

- 11. Explain Binomial Nomenclature.
- 12. Give a brief account of Dinoflagellates.
- 13. Differentiate between red algae and brown algae.
- 14. Describe the four type of placentations found in flowering plants.

- 15. What is meant by emascutation? When and why does a plant breeder employ this technique?
- 16. Discuss the various types of pollen tube entry into ovary with the help of diagram.
- 17. Give an account of floral diagram.
- 18. Describe the essential organs of solomascar.
- 19. Write brief account on polysaccharides.
- 20. Explain prophase I of meiosis.
- 21. Enumerate the morphological adaptations of xerophytes.
- 22. Enumerate the morphological adaptations of hydrophytes.

Section - C 2×8=16

#### Answer any FOUR questions (short answer type)

- 23. With neat labelled diagram, describe the parts of a mature angiospermic embryosac mention the role of synergids.
- 24. Write a brief account on agents of pollination.
- 25. Describe the structure of the following with the help of labelled diagram.
  - (a) Nucleus (b) Centrosome
- 26. Describe the T.S. of Dicot root.