

Board of Intermediate Education (TS)

Held on 10-03-2020

0127**A**

Total No. of Questions—21

Total No. of Printed Pages—2

Regd. No.

--	--	--	--	--	--	--	--	--	--

Part III**BOTANY, Paper - I****(English Version)****Time : 3 Hours]****[Max. Marks : 60****Note :—** Read the following instructions carefully :

- (i) Answer all the questions of Section A. Answer ANY SIX questions out of eight in Section B and answer ANY TWO questions out of three in Section C.
- (ii) In Section A, questions from Sl. Nos. 1 to 10 are of 'very short answer type'. Each question carries TWO marks. Every answer may be limited to 5 lines. Answer all the questions at one place in the same order.
- (iii) In Section B, questions from Sl. Nos. 11 to 18 are of 'short answer type'. Each question carries FOUR marks. Every answer may be limited to 20 lines.
- (iv) In Section C, questions from Sl. Nos. 19 to 21 are of 'long answer type'. Each question carries EIGHT marks. Every answer may be limited to 60 lines.
- (v) Draw labelled diagrams, wherever necessary for questions in Sections B and C.

SECTION A**10×2=20****Note :—** Answer ALL the questions. Each answer may be limited to 5 lines.

1. What is the basic unit of classification ? Define it.
2. What is Omega taxonomy ?
3. What does 'S' refer in a 70S and 80S ribosomes ?
4. Define population and community.
5. What is meant by pulvinus leaf base ? In members of which angiospermic family do you find them ?

6. Define placentation. What type of placentation is found in *Dianthus* ?
7. Starch, Cellulose, Glycogen, Chitin are polysaccharides found among the following. Choose the one appropriate and write against each :
- Cotton fibre
 - Exoskeleton of cockroach
 - Liver
 - Peeled Potato.
8. What is Palaeobotany ? What is its use ?
9. State *two* economically important uses of heterotrophic bacteria.
10. If a tissue has at a given time 2048 cells, how many cycles of mitosis had the original parental single cell undergone ?

SECTION B

6×4=24

Note :—Answer **ANY SIX** questions. Each answer may be limited to **20** lines.

- What are the characteristic features of Euglenoids ?
- What is heterospory ? Briefly comment on its significance. Give *two* examples.
- Distinguish between asexual and sexual reproduction. Why is vegetative reproduction also considered as a type of asexual reproduction ?
- Give economic importance of plants belonging to Fabaceae.
- Write a brief account on classification of xerophytes.
- Give a brief account of the types of chromosomes based on the position of centromere.
- A transverse section of the trunk of a tree shows concentric rings. How are these rings formed ? What is the significance of these rings ?
- Though redundantly described as a resting phase, interphase does not really involve rest. Comment.

SECTION C

2×8=16

Note :—Answer **ANY TWO** questions. Each answer may be limited to **60** lines.

- Define root modification. Explain how root is modified to perform different functions ?
- With a neat labelled diagram, describe the parts of a mature angiosperm embryo sac. Mention the role of synergids.
- Describe the internal structure of dorsiventral leaf with the help of labelled diagram.