14) List out the applications of plant tissue culture in the field of horticulture.
15) Give a brief account on intellectual property rights.

SECTION – D

IV. Answer the following in **one** word or **a** sentence **each** : **(10×1=10)**

16) Expand GAAT.
17) Dedifferentiation.
18) Gametoclone.
19) Variant.
20) Expand PEG.
21) Vir-gene.
22) Who is the father of plant tissue culture ?
23) What is direct embryogenesis ?
24) What is the ploidy of embryo sac ?
25) HEPA.

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VI Semester B.Sc. Examination, September 2020
(CBCS) (2016-17 and Onwards)
(F+R)
BIOTECHNOLOGY (Paper – VII)
Plant Biotechnology

Time : 3 Hours Max. Marks : 70

Instruction : ***Draw*** *neat labelled diagrams* ***wherever*** *necessary.*

SECTION – A

I. Write short notes on the following : **(5×2=10)**

1) Gibberlic acid.
2) Sodium hypochlorite.
3) Log phase.
4) Heterokaryon.
5) Endosperm.

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SECTION – B

II. Answer **any four** of the following : **(4×5=20)**

6) Brief about any two growth regulators used in plant tissue culture.
7) What is somaclonal variation ? Add a note on its application.
8) Explain micro projectile technique as a method of transformation.
9) Write the structure and functions of Ti-plasmid.
10) Give an account on Trade secretes in brief.

SECTION – C

III. Answer **any three** of the following : **(3×10=30)**

11) Explain in detail the large scale production of secondary metabolites with suitable examples.
12) Discuss the principle and applications of ovary and ovule culture.
13) Describe the methods involved in protoplast fusion, and add a note on cybridization.

P.T.O.