

M.Sc. 3rd Semester Examination, 2019

BOTANY

PAPER—BOT-304 (CBCS)

Full Marks : 40

Time : 2 hours

Answer all questions

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

Write the answers to questions of each Unit in separate books

UNIT – I

(Plant and Environment)

[Marks : 20]

1. Answer any *two* of the following : 2 × 2
- (a) Name one each of aquatic and hilly plant.
 - (b) Define population.
 - (c) What is Pneumatophore ?
 - (d) What is Joint Forest Management (JFM) ?
2. Write short notes on any *two* of the following : 4 × 2
- (a) Biosphere Reserve
 - (b) Eutrophication
 - (c) Vivipary and crypto-vivipary
 - (d) Social value of Indian biodiversity.
3. Answer any *one* of the following : 8 × 1
- (a) Define Wetlands including aquatic system. Write three important functions of Waterlogged wealth. Name two Indian Ramsar Sites. 3 + 3 + 2
 - (b) What is community initiative in ecology ? Write briefly the Chipko Movement. Mention two environmental laws in India. 3 + 3 + 2

UNIT – II

(*Biotechnology and Human Welfare*)

[*Marks : 20*]

4. Answer any *two* questions : 2 × 2
- (a) What is sweet dessert wine ?
 - (b) Name two vegetable fermented food.
 - (c) What are transgenic organisms ? Give example.
 - (d) What do you mean by GMO ?
5. Answer any *two* questions : 4 × 2
- (a) Describe structural aspects of cry protein.
How Bt gene impart insect resistance in plants ? 2 + 2
 - (b) Write short notes on biodiesel. 4
 - (c) Mention different types of sausages and their casing materials. 2 + 2

(d) How can macroelement and microelement be distinguished on the basis of concentration in medium ? Name two macroelements and two microelements. 2 + 2

6. Answer any *one* question : 8 × 1

(a) Mention different steps for wine production.
Name any two oriental fermented food. 6 + 2

(b) Write usefulness of 4 macroelements and 4 microelements in tissue culture medium of plants. 4 + 4
