

Day : Friday
Date : 03/11/2017

W-2017-0562

Time : 03.00 PM TO 06.00 PM
Max. Marks: 60.

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate full marks.
- 3) Draw neat and labeled diagrams **WHEREVER** necessary.

- Q.1** A) Attempt the following: (MCQ) (06)
- a) ----- is commonly known as button mushroom
(i) *Agaricus bisporus* (ii) *Pleurotus sajor – Caju*
(iii) *Amanita* (iv) None of these
 - b) ----- is father of tissue culture.
(i) Bonner (ii) Haberland
(iii) Coleman (iv) Ceautheret
 - c) Nitrogen fixing blue green alga is -----
(i) *Ulothrix* (ii) *Spirogyra* (iii) *Anabaena* (iv) *Rhizobium*
 - d) ----- used as aquatic fern which is an excellent biofertilizer
(i) *Salvia* (ii) *Azolla* (iii) *Marsilea* (iv) *Pteridium*
 - e) Neem product used as insect repellent is -----
(i) Azadiractin (ii) Rotenone (iii) Parathion (iv) Endrin
 - f) Leghaemoglobin is found in -----
(i) Root nodules of legumes (ii) Mycorrhiza
(iii) Coralloid roots (iv) Cyanobacter
- B)** Attempt the following (**One** sentence/ statement/ definition) (06)
- a) What are biofertilizers?
 - b) Enlist non-convention foods with suitable examples.
 - c) What is a spawn?
 - d) Enlist importance of tissue culture in plant science.
 - e) What is biopesticide?
 - f) Give nutritive value of mushroom.
- Q.2** Attempt any **THREE** of the following: (12)
- a) Explain brief methods of cultivation of *Agaricus bisporus*.
 - b) Describe methods of cultivation *Spirulina*. Give its role in human life.
 - c) Define bioenergy. Describe importance of energy plantation.
 - d) Comment on non-conventional food with reference to fungi and bacteria.
- Q.3** Attempt any **THREE** of the following: (12)
- a) Describe scope and importance of industrial botany.
 - b) What is biofertilizer? Give its applications in agriculture with reference to blue green algae.
 - c) Describe various steps of tissue culture method.
 - d) Explain how industrial waste used for production of bioenergy.
- Q.4** Attempt any **TWO** of the following: (12)
- a) Describe the environmental biofertilizers in India and health hazards due to pesticides and fungicides.
 - b) Describe steps involved in the production of *Rhizobium* biofertilizer.
 - c) Explain edible and poisonous mushroom with suitable examples.
- Q.5** Attempt any **TWO** of the following: (12)
- a) Describe advantages and disadvantages of chemical fertilizers.
 - b) Explain the scope for commercial cultivation mushroom.
 - c) Describe plant base chemical products Pheromones and Trichoderma.