

Time- 2 ½ Hours

Marks-75

Please check whether you have got the right question paper.

- N.B.**
1. All questions are compulsory
  2. Draw neat labelled diagrams
  3. All questions carry equal marks

**Q1 Attempt any two**

**15**

- a Define dietary antioxidants. Add a note on the health benefits of dietary antioxidants.
- b Enumerate the role of food as medicine in treating obesity.
- c Explain the relationship of diet and skin health.
- d Elaborate on the method of cultivation of *Pleurotus*.

**Q2 Attempt any two**

**15**

- a Give an account on the principle involved in micropropagation technique with reference to floriculture
- b What is plant cell suspension culture? Add a note on importance of cell suspension culture .
- c What are artificial seeds? Describe the procedure for the production of artificial seeds.
- d Explain the technique of isolation of protoplast .Add a note on Somatic hybridization.

**Q3 Attempt any two**

**15**

- a Explain in detail the principle & working of a colorimeter.
- b Give a detailed account of instrumentation of spectrophotometer.
- c Give a brief account of the detectors used in HPLC.
- d What is Ion Exchange Chromatography? Add note on types of resins used.

**Q4 Attempt any two**

**15**

- a Describe the propagation methods and harvesting of *Acorus calamus*.
- b Describe the methods of processing and storage of *Curcuma longa*. Add a note on cultivation practices.
- c Describe biological source, macro and microscopical characters of Clove buds.
- d Describe chemical constituents and therapeutic uses of *Strychnos nux-vomica* seeds.

**Q5 Attempt any three**

**15**

- a Fortification of food of patients with anaemia .
- b Grading and packaging of mushrooms.
- c Protoplast fusion.
- d Advantages of somatic embryogenesis.
- e Applications of colorimeter.
- f Post-harvest processing of *Allium sativum*.

\*\*\*\*\*