This question paper contains 2 printed pages

LB-58-2023

FACULTY OF SCIENCE AND TECHNOLOGY

M.Sc. (First Year) (Second Semester) EXAMINATION

APRIL/MAY, 2023

(New/CBCS Pattern)

BOTANY

Paper-VI

(Bioinstrumentation and Methods in Biology)

(Thusday, 4-5-2022)

Time: 10.00 a.m. to 1.00 p.m.

Time—Three Hours

Maximum Marks—75

- N.B. := (i) Attempt all questions
 - (ii) All questions carry equal marks.
 - (iii) Illustrate your answers with suitable diagram, scheme etc.
- 1. Describe working and application of Microtomy.

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Describe working and application of compound microscope.

2. Describe the sterilization by filtration methods.

Or

Describe the principles, working and applications of Autoclave and Incubator.

3. What are Radioactive Isotopes? Describe the effect of radiations on biological systems and uses of radioisotopes in life sciences and biotechnology.

Or

Describe the principles and techniques of colorimeter, UV-visible spectrophotometer.

P.T.O.

4. Describe the principle and applications of Cooling and Ultracentrifuge.

Or

Describe the principle and applications of PAGE.

- 5. Write short notes on any three of the following:
 - (a) Hazards and waste disposal
 - (b) Paper chromatography
 - (c) Geiger counter
 - (d) AFLP techniques.