

**PD-504 CV-19**  
**M.Sc. BOTANY (FOURTH SEMESTER)**  
**Examination JUNE- 2021**  
**Optional**  
**Elective - I (B)**  
**Paper - IV**

Name/Title of Paper- WEED BIOLOGY-II  
Time:- Three Hours

Maximum Marks- 080  
Minimum Passing Marks-029

Note: Answer From Both the Section as Directed. The Figures in the right-hand margin indicate marks.

**Section-A**

1. Answer very brief and precisely: 1x10=10
- a. Define seed viability.
  - b. Write the full form of T. T. C.
  - c. Give the full chemical name of Butachlor.
  - d. Provide the names of two Bioterbicide.
  - e. Give botanical names (only) of at least four aquatic weeds.
  - f. Write the name of insect and its stage used to manage water hyacinth.
  - g. Who proposed "safe site concept"?
  - h. What are Herbicides?
  - i. What is the chemical name of Nitrofen?
  - j. Give the full form of D.R.B.
2. Answer the following questions very concisely: 2x5=10
- a. What is physical weed control?
  - b. Define the concept of Integrated Weed Management.
  - c. Comment upon the D. R. B.
  - d. Comment in very brief on 2, 4-D.
  - e. Give any 2 precautions while using herbicides.

**Section-B**

15x4=60

3. What is the utility of light for germination?  
Describe giving examples of some weeds.  
Or  
Comment on:  
(a) Seed longevity                      (b) Pattern of emergence
4. Describe insect-based biological control of weeds in detail.  
Or  
Describe fungi-based biological control in detail.
5. How the herbicides are classified. Give a detail account of classification of herbicides?  
Or  
Write notes on the following:  
a. Application methods of Herbicides  
b. Mode of action of Herbicides
6. Describe the chemistry of Butachlor and Nitrofen.  
Or  
Write notes on the following:  
a. Herbicides interactions and plant environment  
b. Weed thresholds and management