



**COLLEGE OF AGRICULTURE, FISHERIES AND FORESTRY (CAFF)**

**SCHOOL OF AGRICULTURAL SCIENCES**

**DEPARTMENT OF CROP PRODUCTION**

**BACHELOR OF SCIENCE IN AGRICULTURE YEAR III**

**AGO 703 (Weed Management)**

**Date of Examination:**

**Time:**

**FINAL EXAMINATION TRIMESTER- 2, 2017**

**DURATION 3 HOURS**

**(An extra 10 minutes reading time in which you are NOT permitted to write)**

**INSTRUCTIONS TO STUDENTS**

1. This paper consists of 04 pages. Please check to see that your paper is complete.
2. Printed or written material is not allowed in examination hall.
3. Answer all the questions in the answer booklet. Number your answers correctly in the answer booklet.
4. Attach all the sheets used as your answer paper in their correct sequence and secure with a string.
5. Use both sides of the answer sheet and write your candidate number on each sheet.

<b>SECTION</b>	<b>PARTICULARS</b>	<b>TOTAL MARKS</b>	<b>THE ALLOCATIONS</b>
<b>A</b>	<b>Part 1: Fill in the Blanks Part 2: True and False Part 3: Matching</b>	<b>30</b>	<b>30 minutes</b>
<b>B</b>	<b>Short answers</b>	<b>30</b>	<b>60 minutes</b>
<b>C</b>	<b>Long answers</b>	<b>40</b>	<b>90 minutes</b>
	<b>Total</b>	<b>100</b>	

## SECTION –A

There are three parts in this section. All the questions are compulsory. In your answer booklet write the question number followed by the answer.

**Part 1: Fill in the blanks with appropriate answers.**

**(15×1=15 Marks)**

1. Application of herbicides with irrigation water both by surface and sprinkler systems.....
2. \_\_\_\_\_ is the application of herbicides to small patches of weeds, leaving the weed-free gaps untreated.
3. A \_\_\_\_\_ is one that will kill some plant species when applied to a mixed plant population, without causing serious injury to the other species.
4. A \_\_\_\_\_ maintains its phytotoxic effects in soil for considerable time after its application.
5. Continuous herbicide usage to destroy the normal races of a weed spp. results in development of new ecotypes which may sometimes prove tolerant to herbicides used called \_\_\_\_\_
6. Thermal weed control can be achieved by \_\_\_\_\_
7. \_\_\_\_\_ is study of inter-relationship between weed and their environment.
8. \_\_\_\_\_ is the direct or indirect chemical effect of one plant on the germination, growth or development of neighboring plants.
9. \_\_\_\_\_ is an annual weed.
10. Critical period of crop-weed competition is the \_\_\_\_\_ time span in the ontogeny of crop when weeding results in highest economic returns.
11. \_\_\_\_\_ are the plants, which grow where they are not wanted.
12. \_\_\_\_\_ is related to the study of weeds in relation to their geographical distribution, habitat, growth and population dynamics of weed species and communities.
13. Runners of floating weeds like water hyacinth and water lettuce (*Pistia lanceolata*) are called \_\_\_\_\_
14. \_\_\_\_\_ name reads out full molecular structure of the herbicide.
15. When daughter plants have allopathic effect on parent plant, called as \_\_\_\_\_

**Part 2: True or False**

**(10×1 =10 Marks)**

- (1) Contamination of food grains with poisonous weed seeds fetches low price.
- (2) Reduction of crop yield has a direct correlation with weed competition.
- (3) Herbicides are not used in dust forms for fear of their drift hazards, which may be intense.
- (4) Harvesting becomes troublesome when weeds bind the crop plants together.
- (5) Annual weeds are characterized by the production of very large number of seeds.
- (6) Spot treatment is good for weeds in lawn.
- (7) Increasing weed density increasing the crop yields.
- (8) Sugarcane is subjected to heavy weed growth during early stage of growth.
- (9) Crop weed competition becomes critical with decreasing soil moisture stress.
- (10) In general for producing equal amount of dry matter weeds transpire less water than field crops.

**Part 3: Match the following.**

**(5×1=5 Marks)**

- |                                 |   |                    |
|---------------------------------|---|--------------------|
| 1. <i>Convolvulus arvensis</i>  | A | Aquatic weed       |
| 2. <i>Hydrilla Verticillata</i> | B | Floating weed      |
| 3. <i>Argemone Mexicana</i>     | C | Noxious weed       |
| 4. <i>Cyperus rotundus</i>      | D | Objectionable weed |
| 5. <i>Eichhornea crassipes</i>  | E | Dry land weed      |

**SECTION- B (Short Answers)**

**(6×5= 30 Marks)**

**Answer all the questions. Each question carries 5 marks.**

1. Why is classification of weeds required?
2. What do you understand by nomenclature of herbicides?
3. Apply importance of critical weed free period in weed management.
4. Provide advantages and disadvantages of chemical methods of weed control.
5. What is the difference between mode of action of narrow spectrum and broad spectrum herbicides?
6. What is the importance of mulching in weed management?

**SECTION-C (Long answers)**

**(5×8=40 Marks)**

**Answer all of the following questions. Each question carries 8 marks.**

1. What is organic weed management? Provide details of weed management in organic farms.
2. Apply concept of integrated weed management in sustainable weed management.
3. Knowledge of the characteristic features of weeds is very important to develop appropriate weed control. Analyse the statement in detail.
4. What are the factors responsible for persistence of weeds? Provide detail of each factor.
5. Apply concept of crop-weed competition in weed management. Analyse principles of crop weed competition in detail.

**THE END**