

B.Sc. (Ag.) Honours Semester-III Examination, 2014
Course No: AGR-211 (Weed Management)
(New Syllabus)

Signature of Centre Superintendent

Roll No. : (in figure) _____ (in words) _____

Student Index No. _____ Regn. No. _____ of _____

Time : Two Hours

Full marks : 40

Questions are of value as indicated in the margin

Part - I
(Objective and Short Answer Type)
(Use only ball point pen)

Time : 20 minutes

Full marks : 10

- Note:** 1. Answer in question paper itself.
2. Striking, rewriting or overwriting are not allowed in the objective type questions.

1. **State True (T) or False (F) in respect to the following statements (any five):** 0.5×5=2.5
- (i) *Chenopodium album* is a summer season weed. ☐
 - (ii) Water hyacinth is a submerged aquatic weed. ☐
 - (iii) *Loranthus* is a stem parasite in cotton. ☐
 - (iv) *Cyperus rotundus* is a perennial grass. ☐
 - (v) *Salvinia molesta* is a dryland weed. ☐
 - (vi) The herbicide quizalofop-p-ethyl is a grass killer. ☐
 - (vii) The selectivity in 2, 4-DB is due to differential morphology. ☐
2. **Fill up the blanks with most appropriate words (any five):** 0.5×5=2.5
- (i) *Ludwigia parviflora* is a weed of _____ season.
 - (ii) The herbicide pendimethalin belongs to the chemical group _____.
 - (iii) *Echinochloa crusgalli* is a common weed in _____ crop.
 - (iv) The scientific name of little seed canary grass is _____.
 - (v) The dose of same herbicide will be _____ in sandy soil as compared to clay soil.
 - (vi) A common weed in alkaline soil is _____.
 - (vii) The herbicide *atrazine* is selective in maize due to presence of _____.
3. **Tick (✓) the correct alternatives (any five):** 0.5×5=2.5
- (i) Paraquat is a (a) pre-emergence selective (b) Post-emergence selective (c) pre-emergence contact (d) Post emergence contact herbicide.
 - (ii) Bispyribac-sodium is a herbicide for (a) jute (b) sesame (c) potato (d) rice crop
 - (iii) The enzyme which is inhibited by glyphosate is (a) ALS (b) β-oxidase (c) EPSP (d) G-S-transferase

(2)

- (iv) Crop rotation is very effective in management of (a) crop associated weed (b) parasitic weed
(c) satellite weed (d) all of these.
- (v) Sulfosulfuron is a herbicide mainly recommended in (a) potato (b) wheat (c) rice (d) greengram
- (vi) In soil solarization the soil temperature increases by (a) 4-6°C (b) 6-8°C (c) 10-12°C (d) none
- (vii) Weeds act as (a) alternate host of insect pest (b) alternative host of insect pest
(c) alternative host of insects and diseases (d) all of these.

4. Match the column 'A' with column 'B' and write your answer in column 'C' based on column 'A'

0.5×5=2.5

Column-A

- i) Devine
- ii) Collego
- iii) Velgo
- iv) CAAST
- v) Bipolaris

Column-B

- a) Johnson grass
- b) *Abutilon sp.*
- c) *Cassia obtussifolia*
- d) *Phytophthora palmivora*
- e) *Aeschynomene sp.*

Column-C

B.Sc. (Ag.) Honours Semester-III Examination, 2014

Course No: AGR-211 (Weed Management)

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Part - II

(Descriptive Type)

Time : 100 Minutes

Full marks : 30

Questions are of value as indicated in the margin

Answer any four questions from the following :

5. (a) Define weed. What do you mean by noxious weed?
(b) Classify weeds on the basis of season of occurrence and habitat.
(c) Mention four important beneficial and harmful effects of weed. 2+4+1.5=7.5
6. (a) What do you mean by cultural method of weed management?
(b) Give a list of cultural methods of weed management.
(c) Briefly discuss about the role of crop rotation and stale seed bed technique in weed management. 1.5+2+4=7.5
7. (a) What do you mean by herbicide? How do you classify herbicide based on time of application?
(b) Write in brief the scope and limitation of herbicide use in India.
(c) Give two examples each of selective and non-selective herbicide. 2.5+4+1.0=7.5
8. (a) Give a list of major weeds in direct seeded rice and maize.
(b) Write in brief about weed management in potato.
(c) Mention four methods of management of aquatic weed.
9. (a) Define integrated weed management (IWM)
(b) What are the principles of IWM?
(c) Write the advantages of IWM. 1.5+3+3=7.5
10. Write short notes on (**any five**) : 1.5×5=7.5
- (a) Critical period of crop-weed competition
 - (b) Adjuvants & their use in herbicide
 - (c) Seed rain versus seed bank
 - (d) Methods of herbicide application
 - (e) Allelopathy
 - (f) Weed prevention and weed eradication
 - (g) Soil solarization and weed management
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