Time: 2 hrs



GIET UNIVERSITY, GUNUPUR – 765022 B. Sc. (Ag.)(Fifth Semester) Examinations, January – 2023 AG(E)-312 – Weed Management

Maximum : 50 Marks

The figures in the right hand margin indicate marks.

$\mathbf{PART} - \mathbf{A}$

Q.1. Fill in the blanks with suitable word / figure.

- a. Cuscuta chinensis on Lucerne is weed.
- b. The word weed was first coined by
- c. Bio-agent for controlling Partheniumhysterophorus
- d. The botanical name of associated weed in rice field is
- e. Weed responsible for forest fire is
- f. use of herbicides is the best policy to avoid occurrence of resistance in weeds.
- g.is a plant where it is not desired.
- h. Adoptions of anapproach help to avoid resistance as well as build strong and ecoenvironmental relationship.
- i. The phenomenon of one living organism living in, on, or with another living organism to complete its life cycle is called
- j. Dredging is most effective treatment for controlling

Q. 2. Define (or) Explain the following in one or two sentences.

- a. True Allelopathy
- b. Weed Control Efficiency
- c. Herbicide formulation
- d. Herbicide Mixture
- e. Adjuvant

Q3. Match the following

(0.5 x 10 = 5 Marks)

(1 x 5 = 5 Marks)

Column – A		Column – B	
(a)	Abnormal tissue development	(i)	Stem
(b)	Purple nutsedge	(ii)	Auxin type herbicides
(c)	Xanthium strumarium	(iii)	Hooks
(d)	Devine	(iv)	Cyperus rotundus
(e)	Paraquat	(v)	Morrentia odorata
(f)	Pistia lanceolata	(vi)	Contact herbicide
(g)	Glyphosate	(vii)	Systemic herbicide
(h)	Cyperus rotundus	(viii)	Offset
(i)	Hydrilla verticillata	(ix)	Tubers
(j)	Cuscuta arvensis	(x)	Turions

 $(0.5 \times 10 = 5 \text{ Marks})$

Q4. Write True or False against each statement

- b. Weed is a plant growing out of place and time.
- c. Spray drifts can be minimized by decreasing the size of spray droplets .
- d. *Cuscuta* is a stem parasitic weed.

a.

- e. Biological weed control was more successful on native weeds.
- f. Spray drifts can be minimized by decreasing the size of spray droplets .
- g. *Cuscuta* is a stem parasitic weed.
- h. Flat fan/ Flood jet nozzle is used for spraying of herbicide.
- i. Biological weed control was more successful on native weeds.
- j. Weed index also called as weed smothering efficiency.

PART - B

Attempt ANY FIVE questions. All question carries equal marks(6 x 5 = 30 Marks)

- 5. Define weed and mention the biological methods of weed control.
- 6. Classify herbicide based on time of application, selectivity and site of application with suitable examples..
- 7. Describe different principles of weed management.
- 8. Write the chemical control of weeds in maize, groundnut and sugarcane.
- 9. Classify weed according to morphology, origin and life cycle with suitable examples.
- 10. Distinguish between the followings with suitable examples.
 - i. Selective Herbicide verses Non-selective Herbicide.
 - ii. Functional Allelopathy verses True Allelopathy
 - iii. Crop associated weed verses crop bound weeds

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