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QPC: RJ19BSCAG067

GIET UNIVERSITY, GUNUPUR – 765022

B. Sc (AG) (Fifth Semester) Examinations, December – 2020

EC-352 - WEED MANAGEMENT

Time: 2 hrs Maximum: 50 Marks

The figures in the right hand margin indicate mark <u>Part A</u>

Q.1. I	Fill in the blanks with suitable word/ figure	$(10 \times 0.5 = 5)$		
a)	a) Based on characters weeds are classified into monocot and dicot.			
b)	Weeds introduced from other countries called			
c)	Cuscuta chinensis on Lucerne is			
d)	are the chemicals added in the	ne herbicide formulates in order to		
	improve their efficiency i.e toxic effect of herbicides on we	eds.		
e)	reduces th	e surface tension of water and allow		
	herbicides for better penetration on the weeds.			
f)	nozzle is used for spraying of herbicides			
g)	is an evolutionary process and it develops slowly	and slowly over years.		
h)	use of herbicides is the best	policy to avoid occurrence of		
	resistance in weeds.			
i)	Adoptions of anapproach help to avoid	l resistance as well as build strong		
	and eco-environmental relationship.			
j)	The phenomenon of one plant having detrimental effect on	another plant through production or		
	release of toxic chemicals called			
Q.2. Define or explain the following in one or two sentence $(5 \times 1=5 \text{ Marks})$				
a)	Define weeds			
b)	Beneficial effects of weeds			
c)	What is herbicide			
	Emulsifiable concentrate(EC)			
e)	Advantages of bio-herbicides			
Q.3.	Match the following (Col. A with B)	$5 \times 1 = Marks$		

Column- A		Column-B	
(a)	Phalaris minor	(i)	Ureas
(b)	Alachlor	(ii)	Triazines
(c)	Digitaria sanguinalis	(iii)	Bipyridiums
(d)	Chlorimuron	(iv)	Perennial grass
(e)	Xanthium strumarium	(v)	Sulfonyl urea
(f)	Atrazin	(vi)	Sedge
(g)	Diuron	(vii)	Gramineae
(h)	Cyperus rotundus	(viii)	Anilides
(i)	Paraquat	(ix)	Annual grass
(j)	Cynodon dactylon	(x)	Hooks

Q.4. Write true or false against each statement

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

- a) Butachlor is a post emergence herbicide for rice weed management
- b) All weeds are unwanted plants but all unwanted plants may not be called weeds
- c) Cuscuta is a root parasitic weed
- d) Total annual loss of agricultural produce due to weeds is maximum
- e) Grassy weeds can be effectively controlled by 2,4-D
- f) Zygogramma bicolorata (Mexical beetle) used to control water hyacinth
- g) Flat fan/ Floodjet nozzle is used for spraying of herbicide
- h) Weeds do not have the capacity to strive under adverse climatic condition
- i) Soil solarization is a technique of controlling soil borne pests including weeds.
- j) Spray drifts can be minimized by decreasing the size of spray droplets

PART - B

Attempt $\underline{ANY FIVE}$ questions. All questions carried equal marks (5 x 6 = 30 Marks)

- 5. Briefly write about classification of weeds based life cycle/ontogeny.
- 6. Classify herbicide based on time of application of herbicides with suitable examples.
- 7. What do you mean by adjuvant. Explain the role of various adjuvants in enhancing herbicide efficacy.
- 8. Write briefly the cause of herbicide resistance and how it can be overcome.
- 9. Briefly describe about physical and cultural methods of weed control
- 10. How manipulation of agronomic practices and rotational use of herbicides control resistant weeds. Discuss

END OF PAPER