

**GIET UNIVERSITY, GUNUPUR – 765022**

B. Sc (AG)(First Semester) Examinations, June – 2021

AG 111- Fundamentals of Agronomy

Time: 2 hrs

Maximum : 50 Marks

The figures in the right hand margin indicate marks.**PART – A**

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

(0.5 x 10 = 5 Marks)

- Nitrogen in urea is present in the form of _____
- The father of Agronomy is _____
- DAP contains _____% of phosphorus
- Cynodon dactylon* is a _____ weed. (annual / perennial)
- Furrow method of irrigation is suitable for _____ crops
- The property of attraction of unlike molecules with each other is termed as _____
- Sesbania aculeate* is grown to reclaim _____ soil
- _____ seed is the progeny of foundation seed
- The phenomenon of one plant having detrimental effect on another through production of chemicals is called _____
- Name of a herbicide used to control weeds in non-cropped area is _____

Q. 2. Define (or) Explain the following in one or two sentences**(1 x 5 = 5 Marks)**

- Consumptive use
- Zero tillage
- Critical period of crop-weed competition
- Criteria of essentiality
- Surfactant

Q3. Match the following**(0.5 x10 = 5 Marks)**

Column – A		Column – B	
(a)	Brix	(i)	Ginning
(b)	Jute	(ii)	Hyderabad
(c)	<i>Phalaris minor</i>	(iii)	Desuckering
(d)	Cotton	(iv)	Emitters
(e)	CSSRI	(v)	Retting
(f)	Trickle irrigation	(vi)	Tiles
(g)	Sub surface irrigation	(vii)	Wheat
(h)	CRIDA	(viii)	KNO ₃
(i)	Salt Petre	(ix)	Sugarcane
(j)	Tobacco	(x)	Karnal

Q4. Write True or False against each statement

(0.5 x 10 = 5 Marks)

- a. Both seeds and fertilisers should be placed in soil at same depth
- b. Indian Pulse Research Station is situated at Varanasi
- c. Mechanical weed control is quite possible in crops sown in lines
- d. *Zaid* crops are sown after onset of monsoon
- e. Calcium is called as a master nutrient for oilseed crops
- f. Sprinkle irrigation is suitable for areas with steep slope having erosion hazards
- g. Urea is a complex fertiliser
- h. Harvest index is the ratio of biological yield to economic yield and expressed in percentage
- i. *Cyperus rotundus* is an perennial sedge
- j. Downward movement of water in soil under the influence of gravity is called seepage

PART – B

Attempt ANY FIVE questions. All question carries equal marks

(6 x 5 = 30 Marks)

- 5. Define Tillage. How does it differ from tilth? What are the objectives of tillage?
- 6. What is Crop rotation? Write the advantages of crop rotation? What are the different methods of sowing?
- 7. Classify herbicides according to time of application and method of application with suitable examples.
- 8. What is drip irrigation? Write down its advantages and disadvantages?
- 9. Define Bio fertiliser. Narrate about different types of bio fertilisers with good examples.
- 10. Briefly describe about irrigation water quality and its management?

--- End of Paper ---