

Total No. of Questions: 6

Total No. of Printed Pages:2

[2]

Enrollment No.....



Faculty of Agriculture
End Sem (Odd) Examination Dec-2019
AG3CO05 Fundamentals of Agronomy
Programme: B.Sc. (Ag.) Branch/Specialisation: Agriculture

Duration: 3 Hrs.

Maximum Marks: 50

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

- Q.1 i. Agronomy word derived from- **1**
(a) Latin word (b) English word
(c) Greek word (d) French word
- ii. Which seed is called mother seed? **1**
(a) Breeder seed (b) Foundation seed
(c) Registered seed (d) Certified seed
- iii. Which crop has maximum water requirement? **1**
(a) Sugarcane (b) Wheat (c) Cotton (d) Barley
- iv. Which method of irrigation has maximum water use efficiency? **1**
(a) Sprinkler irrigation (b) Drip irrigation
(c) Check basin irrigation (d) All of these
- v. Which is non selective herbicide? **1**
(a) Glyphosate (b) Pendimethaline
(c) Fluchloraline (d) 2-4, D
- vi. Botanical name of congress grass is _____ **1**
(a) *Cynodon dactylon* (b) *Parthenium histophorus*
(c) *Eclipta alba* (d) *Phalaris minor*
- vii. Plant Ideo-type concept given by- **1**
(a) Peter Decresenji (b) M. S. Swaminathan
(c) M.C. Donald (d) Jethro Tull
- viii. Which is C₄ crop? **1**
(a) Soybean (b) Paddy (c) Maize (d) Wheat
- ix. Brix reading of sugarcane at harvesting time- **1**
(a) 10-12% (b) 12-15% (c) 15-17% (d) 18-20%

P.T.O.

- x. P^H of alkali soil is- **1**
(a) 4-5.5 (b) 5.5-6.5 (c) 7.5-8.5 (d) 8.5-10

- Q.2 i. Define Tilt. **1**
ii. What is seed? And write the name of seed according to international crop association. **2**

- iii. Define tillage and describe the types of tillage. **5**
OR iv. What are manures? Describe the classification of nitrogenous fertilizer. **5**

- Q.3 i. What is permanent wilting point? **1**
ii. What is crop water requirement? And write the moisture sensitive stage of following crop- Paddy and Wheat. **3**

- iii. Define irrigation and describe the surface method of irrigation. **4**
OR iv. What is irrigation scheduling? And describe effect of logging on crop yield. **4**

- Q.4 i. What do you mean by allelopathy? **2**
ii. Define relative weed and write the classification of weed based on their ecology **6**

- OR iii. What is integrated weed management? And describe the cultural method of weed control. **6**

- Q.5 i. What is plant Ideo-types? **2**
ii. Differentiate between growth and development. **2**
iii. Explain the principles of crop rotation. **4**

- OR iv. Describe the factor affecting of crop growth and development. **4**

- Q.6 Attempt any two: **4**
i. Define saline soil and describe the reclamation process of saline soil. **4**
ii. Define harvesting and explain the methods of harvesting. **4**
iii. Describe the adaptation and distribution of Paddy and Wheat crop. **4**

Marking Scheme
AG3CO05 Fundamentals of Agronomy

Q.1	i.	Agronomy word derived from- (c) Greek word		1
	ii.	Which seed is called mother seed? (b) Foundation seed		1
	iii.	Which crop has maximum water requirement? (a) Sugarcane		1
	iv.	Which method of irrigation has maximum water use efficiency? (b) Drip irrigation		1
	v.	Which is non selective herbicide? (a) Glyphosate		1
	vi.	Botanical name of congress grass is _____ (b) <i>Parthenium histophorus</i>		1
	vii.	Plant Ideo-type concept given by- (c) M.C. Donald		1
	viii.	Which is C ₄ crop? (c) Maize		1
	ix.	Brix reading of sugarcane at harvesting time- (d) 18-20%		1
	x.	P ^H of alkali soil is- (d) 8.5-10		1
Q.2	i.	Define Tilth.	1 mark	1
	ii.	Define seed Name of seed according to international crop association.	1 mark	2
	iii.	Define tillage Types of tillage.	2 marks 3 marks	5
OR	iv.	Define manures Classification of nitrogenous fertilizer.	2 marks 3 marks	5
Q.3	i.	Permanent wilting point	1 mark	1
	ii.	What is crop water requirement Moisture sensitive stage of following crop- Paddy and Wheat.	1 mark 2 marks	3
	iii.	Define irrigation Surface method of irrigation.	1 mark 3 marks	4

OR	iv.	Irrigation scheduling Effect of logging on crop yield.	1 mark 3 marks	4
Q.4	i.	Define allelopathy (As per explanation)	2 marks	2
	ii.	Define relative weed Classification of weed based on their ecology	2 marks 4 mark	6
OR	iii.	Integrated weed management The cultural method of weed control.	2 marks 4 marks	6
Q.5	i.	Plant Ideo-types	2 marks	2
	ii.	Difference.(As per answer)	2 marks	2
	iii.	Principles of crop rotation.(As per answer)	4 marks	4
OR	iv.	Factor affecting of crop growth and development. (As per answer)	4 marks	4
Q.6		Attempt any two:		
	i.	Define saline soil The reclamation process of saline soil.	1 mark 3 marks	4
	ii.	Define harvesting The methods of harvesting.	1 mark 3 marks	4
	iii.	Describe the adaptation and distribution of- Paddy Wheat crop.	2 marks 2 marks	4
