

Enrollment No.....



Faculty of Agriculture
End Sem (Odd) Examination Dec-2018
AG3CO01 Fundamentals of Agronomy

Programme: B.Sc. (Ag.) Branch/Specialisation: Agriculture

Duration: 3 Hrs.**Maximum Marks: 60**

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 is a branch of agriculture that deals with- **1**
 (a) Breeding of crop plants
 (b) Principles of field management
 (c) Principles and practices of crop production
 (d) Protection of crops from diseases and pests
- ii. A Indigenous plough is- **1**
 (a) A multipurpose implement
 (b) A primary tillage implement
 (c) A secondary implement
 (d) A wetland puddler
- iii. Pollen germination requires which of the following element- **1**
 (a) B (b) K (c) Ca (d) N
- iv. Availability of P is maximum in- **1**
 (a) Acidic soil (b) Neutral soil
 (c) Alkaline soil (d) All of these
- v. Trickle irrigation is also known as- **1**
 (a) Drip irrigation (b) Surge irrigation
 (c) Sprinkler irrigation (d) Cablication
- vi. The concept "plant ideotype" given by- **1**
 (a) Koppen (b) D.A. Walia
 (c) Norfork (d) None of these
- vii. The area where annual rainfall is more than 1150 mm is called **1**
 (a) Dry area (b) Dryland area
 (c) Rainfed area (d) Desert area
- viii. Crop which is known as camel crop- **1**
 (a) Maize (b) Pearl millet
 (c) Sorghum (d) Wheat

- ix. Obligate weed refers to- **1**
 (a) Grown in association with crop
 (b) Grown in an isolated area
 (c) Both (a) and (b)
 (d) None of these
- x. Stale seed bed technique of weed control is- **1**
 (a) Cultural method (b) Chemical method
 (c) Mechanical method (d) Biological method

- Q.2 i. What is Modern concept of tillage? **2**
 ii. Define the agronomy and write its meaning. **3**
 iii. Classify the methods of sowing. **5**
- OR iv. What is seed? Write Characteristics of good quality of seed. **5**
- Q.3 i. What is Soil fertility? **2**
 ii. Explain crop nutrition. Write Different between manure and fertilizer. **8**
- OR iii. What is Plant population? Write types of competition between crop plants. **8**
- Q.4 i. Write definition of crop growth and development. **3**
 ii. Define irrigation and write explain different methods of irrigation. **7**
- OR iii. Define Plant ideotypes. Write ideotypes model for wheat, maize and rice. **7**
- Q.5 i. Define Cropping system. Write types of cropping systems. **4**
 ii. What is crop rotation? Write principles of crop rotation. **6**
- OR iii. Explain Crop management technologies in dryland areas. **6**
- Q.6 Attempt any two:
 i. Define weed & give the classification of weed with example. **5**
 ii. Discuss in details of crop weed competition. **5**
 iii. Write the principles of weed management and discuss on agronomical method of weed management. **5**

Marking Scheme
AG3CO01 Fundamentals of Agronomy

Q.1	i.	Agronomy is a branch of agriculture that deals with-		1					
		(c) Principles and practices of crop production							
	ii.	A Indigenous plough is-		1					
		(a) A multipurpose implement							
	iii.	Pollen germination requires which of the following element-		1					
		(a) B							
	iv.	Availability of P is maximum in-		1					
		(b) Neutral soil							
	v.	Trickel irrigation is also known as-		1					
		(a) Drip irrigation							
	vi.	The concept “plant ideotype” given by-		1					
		(d) None of these							
	vii.	The area where annual rainfall is more than 1150 mm is called		1					
		(c) Rainfed area							
	viii.	Crop which is known as camel crop-		1					
		(c) Sorghum							
	ix.	Obligate weed refers to-		1					
		(a) Grown in association with crop							
	x.	Stale seed bed technique of weed control is-		1					
		(a) Cultural method							
Q.2	i.	Modern concept of tillage		2					
		Any 4 point each point 0.5 mark	(0.5 mark * 4)						
	ii.	Definition of agronomy	1 mark	3					
		Its meaning	2 marks						
	iii.	Methods of sowing		5					
		5 method 1 mark for each method	(1 mark * 5)						
OR	iv.	Definition of seed	2 marks	5					
		Characteristics of good quality of seed.							
		Six points 0.5 mark for each (0.5 * 6)	3 marks						
Q.3	i.	Definition of Soil fertility		2					
	ii.	Definition of crop nutrition	2 marks	8					
		Difference b/w manure and fertilizer.							
		At least six points 1 mark for each (1 mark *6)	6 marks						
OR	iii.	Plant population	2 marks	8					
		Types of competition between crop plants							
		At least six points 1 mark for each (1 mark *6)	6 marks						
Q.4	i.	Definition of crop growth				1.5 marks		3	
		Definition of crop development.				1.5 marks			
	ii.	Irrigation				1 mark		7	
		Different methods of irrigation							
		At least six points 1 mark for each (1 mark *6)				6 marks			
OR	iii.	Definition of Plant ideotypes				1 mark		7	
		Ideotypes model for wheat, maize and rice.							
		2 marks for each model (2 marks * 3)				6 marks			
Q.5	i.	Definition of Cropping system				1 marks		4	
		Types of cropping systems							
		1 mark for each type (1 mark * 3)				3 marks			
	ii.	Definition of crop rotation				2 marks		6	
		Eight Principles of crop rotation 0.5 mark for each				4 marks			
OR	iii.	Crop management technologies in dryland areas						6	
		1 mark for each point				(1 mark * 6)			
Q.6		Attempt any two:							
	i.	Definition of weed				1 mark		5	
		Classification of weed with example							
		0.5 mark for each point (0.5 mark * 8)				4 marks			
	ii.	Crop weed competition						5	
		Each point 0.5 marks				(0.5 mark * 10)			
	iii.	Principles of weed management				1 mark		5	
		Agronomical method of weed management.							
		Each point 0.5 mark (0.5 mark * 8)				4 marks			
