Seat No:_____

Enrollment No:_____

PARUL UNIVERSITY COLLEGE OF AGRICULTURE B.Sc.(Hons.) Agriculture Winter 2019 - 20 Examination

Semester: 3 Subject Code: 20101203 Subject Name: Crop Production Technology -I (Kharif Crops)		Date: 18/11/2019 Time: 2.00 pm to 4.30 pm Total Marks: 50	
Instructions			
1. All questions are compulsory.			
2. Figures to the right indicate full marks.			
3. Make suitable assumptions wherever necessary.			
4. Start new question on new page.			
Q.1 Do as Directed.			
A. Fill in the blanks. (Each of 0.5 marks)			(05)
1 gene is responsible for dwarfness	in wheat crop.		
2. The Main Pearl Millet Research Station is loca			
3. The water requirement of rice is			
4. Nitrogen loss in the soil is occurring as	,,,,	and	
·			
5.1 Unit increase in pH makes Zinc	times less soluble.		
6. In India state is first in rice produc	ction.		
7 responsible for poor photosynthet	ic activity and less utilization	ion of Solar energy.	
8. Seed rate of green gram is for k	harif season variety.		
9 varieties possess the trait of high		eavy fertilizer	
applications.	-	-	
10 gene is responsible for dwarf	ness in rice crop.		
B. Multiple choice type questions. (Each of 0.5 m	arks)		(10)
1. Central Rice Research Institute (CRRI) is loca			
a) Philippines	c) Nawagam		
b) Cuttak	d) Anand		
2. Moisture level of paddy grain should be	at the time of har	vesting.	
a) 20-23%	c) 10-12%	0	
b) 12-15%	d) None		
3. Rice crop is requiring pH of	of soil.		
a) 5.5 – 6.5	c) 6.5-7.5		
b) 4.5-5.5	d) None		
4. Green gram is crop.	,		
a) Drought susceptible	c) Drought tolerant		
b) Both	d) None		
5. Pigeon pea is highly susceptible to	at the time of flowering	g	
a) Dew	c) Fog	-	
b) Frost	d) None		
6. In pearl millet if sowing is delayed, there is a	drastic reduction in yield d	ue to more incidences of	
diseases like			
a) Downy mildew and ergot	c) Leaf curl		
b) Yellow mosaic	d) Seed and Seedling r	ot	
7. Puddling causes in bulk density			
a) Increase	c) Both		
b) Decrease	d) None		
8 interspecific variety of cotton	,		
a) H4	c) Sonalika		
b) varalaxmi	d) None		
9. In paddy field water loss by percolation is about			
a) 50-60	c) 60-70		
b) 40-50	d) 70-80		
10. Green gram requires bacterial	·		
a) Rhizobium	c) Azosprillum		
11 is the staple food for more than h	· •	ons.	
a) Pearl millet	c) Pigeon pea		
b) Green gram	d) Rice		
o, oron grann			

12		
12 is used as a green manure crop.		
a)Rice	c) Green gram	
b) Pearl millet13 is the origin of pigeon pea.	d) None of these	
a) India	c) South & SE tropical Asia	
b) Africa	d) Central Burma	
14. Rice is a plant.	d) Central Burna	
a) Long day plant	c) Neutral	
b) Short day plant	d) None	
15 variety is tall, weak stemmed an		
heavy fertilizers.	a susceptible to foughing and less responsive to	
a) Indicas	c) Javanicas	
b) Japonicas	d) None	
16. Nitrogen is lost through soil as		
a) NH3 volatilisation	c) Denitrification	
b) Leaching	d) All of the above	
17. In rice the requirement of phosphorus is		
a) 80 kg P_2O_5 /ha	c) $60 \text{ kg } P_2 O_5 / ha$	
b) 40 kg P_2O_5 /ha	d) 20 kg P_2O_5 /ha	
18. Botanical name of black gram is	-	
a) Vigna radiata L.	c) Pennisetum glaucum	
b) <i>Cajanus cajan</i> L.	d) Vigna mungo (L.)	
19. Pearl millet can be grown in season	n.	
a) kharif	c) rabi	
b) Summer	d) a & b both	
20. Green gram should be sown at a		
a)2-3 cm	c) 10-12 cm	
b) 5-7 cm	d) 12-14 cm	
Q.2 Do as Directed.		
A. Define the following. (Any five)		(05)
1. Puddling 2 Critical stages 3.	Ideotype 4 Rouging	
5. Field preparation 6. Water requirement 7.		
B. Answer the following. (Any Five)		(05)
1. Give the reasons for low yield of crops	11	
2. Write down scientific name and family of the fo		
a. Green gram b. Black gram c. Pea 3. Write down BPH resistant varieties of rice	rl millet d. Pigeon pea	
4. Enlist Growth Stages of Maize Plant		
5. Climatic requirement for blackgram		
6. Differentiate: <i>Cajanus cajan</i> var. <i>Bicolour</i>	Vs Cajanus cajan var. flavus	
7. Give reason. Summer pearl millet give more yie		
Q.3 Write short notes. (Any five)	-	(10)
1. Describe the rice varieties:		()
Indicas Japonicas Javanics		
2. Advantages and disadvantages of transplanting	g.	
3. Economic importance of green gram.	6	
4. Chemical weed control for transplanted rice.		
5. Steps for increasing fertilizer use efficiency.		
5. Give detailed information about following fer	tilizers:	
1. BGA 2. Azolla		
Q.4 Attempt any Three/Long Questions		(15)
1. Explain different types of maize?		
2. Chemical, physical and biological changes that	t occur during submergence and puddling in rice?	
3. Detailed crop cultivation practice for Rice ?		
4. Detailed crop cultivation practice for Maize.?	,	

4. Detailed crop cultivation practice for Maize.?