

**PARUL UNIVERSITY**  
**FACULTY OF AGRICULTURE**

**B.Sc.(Hons.) Agriculture Winter 2019-20 Examination**

**Semester: 6****Subject Code: 20101351****Subject Name: Field Crops –II (Rabi)****Date: 16-12-2019****Time: 10:30 am to 01:00 pm****Total Marks: 60****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 1.00 marks)****(10)**

1. The cultivated species of wheat *T. aestivum* having chromosome number \_\_\_\_\_
2. Awn is the extended portion of \_\_\_\_\_
3. The two crops \_\_\_\_\_ and \_\_\_\_\_ are responsible for green revolution in world.
4. Lentil occupies \_\_\_\_\_ as protein is considered.
5. The toxin present in the rape seed and mustard is \_\_\_\_\_
6. Origin of chick pea is \_\_\_\_\_
7. The most critical stage for irrigating the wheat crop is \_\_\_\_\_
8. Scientific name of sunflower is \_\_\_\_\_
9. Row to row spacing in wheat crop is \_\_\_\_\_
10. Scientific name of Nobel cane \_\_\_\_\_

**B. Multiple choice type questions. (Each of 1.00 mark)****(10)**

1. The dwarf gene present in wheat is/are \_\_\_\_\_  
Norin-10  
UZU  
Dee-geo-woo-gen  
All of these
2. The seed rate of wheat is \_\_\_\_\_  
a. 50 kg/ha  
b. 100 kg/ha  
c. 80 kg/ha  
d. 20 kg/ha
3. \_\_\_\_\_ Species of wheat is growing on 87% of total wheat growing area.  
a. *T. aestivum*  
b. *T. durum*  
c. *T. dicoccum*  
d. *T. monococcum*
4. Secondary roots are also called \_\_\_\_\_ in wheat.  
a. Permanent roots  
b. Clonal roots  
c. Crown roots  
d. All of these
5. The sour taste of chickpea is due to presence of \_\_\_\_\_  
a. Malic and Oxalic acid  
b. Palmitic acid  
c. Linoleic acid  
d. None of these
6. Seed rate of normal sown chickpea is \_\_\_\_\_ kg/ha.  
a. 75-100  
b. 20-30  
c. 50-60  
d. 150-200
7. Critical stage for irrigation in pulses is/are \_\_\_\_\_  
a. Pre flowering stage  
b. Pod development stage  
c. Tillering stage  
d. Both a and b
8. Head quarters of IIPR is located at \_\_\_\_\_  
a. Kanpur UP  
b. Ludhiana, Punjab  
c. Hyderabad, AP  
d. Anand, Gujarat
9. The roots which nourishes the seedling growth are \_\_\_\_\_  
a. Seminal roots  
b. Crown roots  
c. Permanent roots  
d. Nodal roots
10. The inflorescence of sugarcane is called as \_\_\_\_\_  
a. Capitulum  
b. Arrow  
c. Siliqua  
d. None of these

**Q.2 Do as Directed.****A. Define the following. (Any five)****(05)**

1. Paira / Utera cropping
2. Nipping

3. Zero tillage
4. Crop logging
5. Intercropping
6. Earthing up
7. Mixed farming

**B. Answer the following. (Any Five)**

**(05)**

1. What is CRI?
2. Root system in wheat
3. Mention the soil types for wheat crop in India?
4. What is chilling and freezing injury?
5. Mention the different sowing methods used for sowing of wheat crop.
6. Mention the research station related to sugarcane crop
7. Write the scientific name of the following crops
  1. Barley
  2. Field pea
  3. French bean

**Q.3 Write short notes. (Any five)**

**(15)**

1. Briefly explain the reasons for sugarcane cultivation on commercial scale in North India even under unfavourable conditions.
2. Differentiate between Desi and Kabuli chickpea?
3. Write about the Climatic requirement, seed rate, variety and hybrids of sunflower
4. Briefly explain the botanical description and enlist the different species of sugarcane?
5. Expand the following acronyms and write down their location.
  1. CGIAR:
  2. CYMMIT:
  3. ICRISAT:
  4. DWR:
  5. IIOR:
  6. SBI :
6. Write the difference between rapeseed and mustard?

**Q.4 Attempt any Three/Long Questions/Example**

**(15)**

1. Explain the cultivation practices for rape seed and mustard?
2. Write the classification of wheat based on different criteria?
3. Explain the cultivation practices of chick pea?
4. Briefly explain the different planting method of sugarcane?