

Seat No: \_\_\_\_\_

Enrollment No: \_\_\_\_\_

**PARUL UNIVERSITY**  
**COLLEGE OF AGRICULTURE**

**B.Sc. (Hons.) Agriculture Summer 2021 - 22 Examination**

**Semester: IV**

**Date: 07/03/2022**

**Subject Code: 20101252**

**Time: 10:30am to 1:00pm**

**Subject Name: Crop Production Technology-II (Rabi crops)**

**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. The fruit type in mustard and rape seed is called as \_\_\_\_\_.
2. Capitulum is seen in \_\_\_\_\_ crop.
3. Inflorescence of sugar cane is called as \_\_\_\_\_.
4. Centre of origin of barley is \_\_\_\_\_.
5. Keeping Quality of oil is dependent on \_\_\_\_\_ to \_\_\_\_\_ ratio.
6. Most critical stage for irrigation in chickpea is \_\_\_\_\_.
7. The term "Crop logging" is related to \_\_\_\_\_ crop.
8. Refined oil of mustard is called \_\_\_\_\_.
9. The acids found on leaves and pods of chick pea are \_\_\_\_\_ and \_\_\_\_\_.
10. Harvesting of individual mature leaves in tobacco is called as \_\_\_\_\_.

**B. Multiple choice type questions. (Each of 0.5 mark)**

**(10)**

1. \_\_\_\_\_ is named as "pulse bowl of India".  
A. Gujarat  
B. Madhya Pradesh  
C. Maharashtra  
D. Punjab
2. Almost all rabi crops are \_\_\_\_\_ plants in photoperiodic nature.  
A. Short day  
B. Long day  
C. Day neutral  
D. None of above
3. The inflorescence of wheat is called \_\_\_\_\_.  
A. Arrow  
B. Panicle  
C. Spike  
D. Pod
4. The type of germination seen in almost all pulses \_\_\_\_\_.  
A. Epigeal  
B. Photoblastic  
C. Hypogeal  
D. All of these
5. Total food production of India in FY - 2020  
A. 295.1 Million tons  
B. 28.31 Million tons  
C. 2831 kilo Grams  
D. 2831 Quintal
6. The major weed found in wheat field is \_\_\_\_\_.  
A. *Amaranthus viridis*  
B. *Lantana camara*  
C. *Phalaris minor*  
D. *striga asiatica*
7. Leading producer of wheat in India \_\_\_\_\_.  
A. Punjab  
B. Rajasthan  
C. Uttar Pradesh  
D. Gujarat
8. Nipping is practiced in \_\_\_\_\_ crops.  
A. Wheat  
B. Rapeseed and mustard  
C. Sugarcane  
D. Chick pea

9. Rajma is also called as \_\_\_\_\_.  
 A. Field pea  
 B. Beans  
 C. Dew bean  
 D. Kidney bean
10. Palmitic and stearic acids are an examples for \_\_\_\_\_.  
 A. MUFA  
 B. Saturated Fatty Acids  
 C. PUFA  
 D. All of the above
11. Rapeseed and mustard oils have \_\_\_\_\_ as an anti nutritional factor.  
 A. Erucic acid  
 B. Linamarin  
 C. Linolenic acid  
 D. Ricinin
12. "Awns" in wheat are the extended portion of \_\_\_\_\_.  
 A. Lemma  
 B. Leaf sheath  
 C. Pelea  
 D. Glumes
13. \_\_\_\_\_ genes are responsible for dwarfness in wheat.  
 A. Rht 1 and Rht 2  
 B. Df 1 and Df 2  
 C. Dee -gee-woo-gen  
 D. UZU
14. \_\_\_\_\_ type of florets are helpful for attracting pollinators in sunflower.  
 A. Ray florets  
 B. Central florets  
 C. Disc florets  
 D. All of the above
15. \_\_\_\_\_ kg of malic and oxalic acids can be harvested from 1 ha. Area of chickpea?  
 A. 4 – 4.5  
 B. 10 - 15  
 C. 40 - 50  
 D. 20 - 25
16. Scientific name of barley is \_\_\_\_\_.  
 A. *Hordeum vulgare*  
 B. *Avena sativa*  
 C. *Triticum aestivum*  
 D. *Phalaris minor*
17. CRI stage of wheat is appearing in \_\_\_\_\_.  
 A. 21-25 DAS  
 B. 60-65 DAS  
 C. 40-45 DAS  
 D. 80-90 DAS
18. The productivity of wheat is highest in \_\_\_\_\_.  
 A. Tamilnadu  
 B. Kerala  
 C. Karnataka  
 D. Punjab
19. \_\_\_\_\_ is act as a limiting factor for the production of pulse crops.  
 A. Sink  
 B. Roots  
 C. Source  
 D. None of these
20. \_\_\_\_\_ method is most suitable for sowing of tobacco crop.  
 A. Broadcasting  
 B. Transplanting  
 C. Drilling  
 D. FIRB

**Q.2 Do as Directed.**

**(05)**

**A. Define the following. (Any five)**

1. Ideotype
2. Nipping
3. Topping
4. Trashing
5. Wrapping
6. Pre Plant Incorporation herbicides
7. Harvesting Index

**B Answer the following. (Any Five) (05)**

1. Late sowing wheat requires 25% extra seed rate as compare to normal seed rate. Justify?
2. What is New generation seeders?
3. Which genes are used for development of semi dwarf wheat and rice varieties?
4. Root system of wheat plant.
5. Asymptotic and parabolic curve of dry matter and plant population.
6. Which are the most critical stages for moisture stress in chickpea?
7. Give reason: Duration of chickpea is less in South India as compare to north India.

**Q.3 Write short notes. (Any five) (10)**

1. Write the difference between Desi and Kabuli chickpea.
2. Briefly explain the different sowing methods of wheat.
3. Give family and botanical name for following crops
  - A. Sun flower
  - B. Barley
  - C. Field pea
  - D. Potato
4. Write the full form of following acronyms and location where it is necessary.
  - A. IIWBR
  - B. ICRISAT
  - C. DOR
  - D. FIRB
5. Enlist the important features of NPT<sub>s</sub> of cereals.
6. Differentiate the rapeseed and Mustard?

**Q.4 Attempt any Three/Long Questions/Example (15)**

1. Describe the crop production technology for chickpea.
2. Describe the crop production technology for wheat.
3. Write the different species, sowing time, planting techniques, seed rate, and yield of sugarcane.
4. Classify the wheat based on different criteria.