Seat No:_____ Enrollment No:_____

PARUL UNIVERSITY

COLLEGE OF AGRICULTURE

B.Sc.(Hons.)Agriculture, Summer 2017- 18 Examination

Semester: 4 **Date: 16/05/2018**
Subject Code: 20102251 **Time: 10:30 am to 1:00 pm**
Subject Name: Breeding of Field/Horticultural Crops **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. _____is one of the leading cereal crop in the world
2. The rice flower is surrounded by _____,_____and _____ .
3. Out Crossing percentage in Maize crop is_____.
4. Full form of SBI is_____.
5. The genus tripsacum is a close relative ____ .
6. _____is an example of an Allopolyploid in wheat
7. Bajra contains _____% protein and ____% Fat.
8. Centre of origin of Bajra is _____.
9. _____is India's predominant crop in Cereal.
10. Corn is most important grain crop in the _____.

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

1. Local name of Pearl Millet is_____.
   a) Bajra c) Rice
   b) Maize d) All of The above
2. Heterosis in rice first reported by Jones in USA in_____ Year.
   a) 1924 c) 1926
   b) 1925 d) 1964
3. Family of Maize is _____.
   a) Poaceae c) Fabaceae
   b) Gamineae d) None of the above
4. AICMIP is located in
   a) Hyderabad c) Mumbai
   b) Delhi d) SDAU
5. HB1 is the first hybrid of _____crop.
   a) Maize c) Babul
   b) Wheat d) Bajra
6. Triticale is a new variety obtain by combining the genome of a wheat with_____
   a) Rice c) Sorghum
   b) Rye d) None of the above
7. _____is Improve Variety of wheat.
   a) Lok-1 c) GW-503
   b) GW-496 d) All of the above
8. Rice crop having_____Stamens.
   a) 4 c) 6
   b) 5 d) 7
9. Cromosome number of Maize crop is
   a) 2n=24 **c)** 2n=28
   b) 2n=20 d) 2n=54
10. Main pulse research station is located at_____.
    a) AAU c) SDAU
    b) JAU d) NAU

Q.2 Do as Directed.

A. Define the following. (Any five) **(05)**

1. Tolerance
2. Hybrid
3. Stamen
4. Pureline
5. Selfing
6. Genotype
7. PYT

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

1. Briefly explains about staminate flower in Maize.
2. Enlist the methods of Breeding for asexually propagated crop.
3. Enlist the types of rice spikelets.
4. Briefly explain crossing techniques in Maize.
5. Briefly Describe the Pedigree method.
6. Enlist the improved Variety of Sugarcane.
7. Enlist the research station of Ground nut crop.

Q.3 Write short notes. (Any five) **(15)**

1. Pure line selection
2. Crossing technique in Maize
3. Breeding population
4. Breeding objective of Rice
5. Biometric
6. Floral Biology of Wheat

Q.4 Long Questions. (Any Three0 **(15)**

1. Emasculation
2 Explain in detail: Breeding Population
3. Breeding Methods
4. Floral Biology of rice