**ASSIGNMENT**

**Course Name: Breeding for Stress Resistance and Climate Change**

**Code (Credit): MGPB0516 (2-1-0)**

 **Write notes on the following topics**

1. Concepts of resistance to insect and pathogen resistance
2. Analysis and inheritance of resistance variation
3. Host defense responses to pathogen invasions- Biochemical and molecular mechanisms
4. Acquired and induced immunity and systemic acquired resistance (SAR)
5. Host-pathogen interaction
6. Gene-for-gene hypothesis
7. Molecular evidence for its operation and exceptions
8. Concept of signal transduction and other host-defense mechanisms against viruses and bacteria
9. Classical and molecular breeding methods - Measuring plant resistance using plant fitness
10. Use of crop wild relatives as a source of resistance to biotic and abiotic factors in major field crops