M. Sc. (Ag) Semester-III Examination 2016
Agronomy
Course: AGR 505
(Agronomy: Agrometeorology and Weather Forecasting)

Time: 3 hours **Full Marks: 50**

Questions are of values as indicated in the margin.

Answer any five questions.

1. Define weather forecasting. What are the different types of weather forecasting with respect to their time range of applicability? Briefly discuss about the application of weather forecasting in agriculture. 1+3+6=10

2. a) Define evaporation and evapotranspiration. Write down meteorological factors affecting evapotranspiration
   b) Discuss briefly about protection of crop from cold. (2+4)+4=10

3. Define weather hazards and enlist various types of weather hazards. How do you mitigate agricultural drought? 1+3+6=10

4. a) What do you mean by precipitation? Briefly discuss about various types of rain.
   b) Define dew. Write down the conditions favourable for dew formation. 1+6+3=10

5. Define remote sensing. What are the platforms used in remote sensing techniques? Briefly enumerate the role of remote sensing in agriculture. 1+3+6=10

6. Distinguish between weather and climate. What do you mean by atmosphere? Briefly enumerate the composition of atmosphere and distribution of temperature in different layers of the atmosphere. 1.5+1+7.5=10

7. Define meteorology and agricultural meteorology. Briefly discuss the importance and scope of agricultural meteorology with special reference to global climate change. 2+8=10

8. Write short notes on (*any four*): 2.5x4=10
   a) Impact of mulching
   b) Photoperiodism
   c) Growing degree day
   d) Global warming
   e) Heat trapping
   f) Cardinal temperature
   g) Artificial rain making
   h) Solar constant

_____