KERALA AGRICULTURAL UNIVERSITY
B.Sc.(Hons.) Agriculture – 2010 Admission - Iˢᵗ Semester
Final Examination – March/April 2011

Cat. No. : Agmt 1101   Max. marks: 80
Title   : Agricultural Meteorology (1+1)   Time   : 3 hours

I. Fill up the blanks/State True or False/Match the following   (20 x 0.5 = 10)

1. _____ (weather parameter) decides the time of sowing in dryland condition

2. Blue colour of the sky and red colour of sunset is due to _____ of sun rays

3. Transition zone between troposphere and stratosphere is _____

4. Visible radiation is the range between _____ and _____ (micron)

5. Lines connecting points of equal temperature is called _____

6. Most commonly used minimum threshold temperature (temperature below which no growth is takes place) for tropical crops is ___ °C

7. _____ colour of light is most favourable for growth of plants

8. Cyclones are more common in Kerala during _____ monsoon season

9. Wind moves from mountain to valley during night is called _____ breeze

10. 1° longitude equals the time span of ___ minute

11. Rainfall is generally measured at 8.30 am in India (True/False)

12. Cumulonimbus clouds are responsible for thunder storms (True/False)

13. When the cloud temperature is positive, clouds are called warm clouds (True/False)

14. Evaporation is more at low pressure and low RH in the atmosphere (True/False)

15. Rice is a long day plant (True/False)

Match the following

16.	Barometer	a.	Atmospheric pressure
17.	Psychrometer	b.	RH
18.	UV rays	c.	Trophosphere
19.	Visible spectrum	d.	0.20 – 0.39 μ
20.	Long distance radio communication	e.	0.39 – 0.76 μ
		f.	Ionosphere

II. Write answers in a word or sentence/ Define   (10x1=10)

1. Agricultural meteorology
2. Phyto-climate
3. Doldrums
4. Conduction
5. Atmospheric humidity
6. Cloud seeding
7. Crop weather calendar
8. Climate risk management
9. Remote sensing
10. Weather modification

III. Write short notes/ answers etc. on ANY TEN   (10x2=20)

1. Importance of Agricultural meteorology
2. Weather Vs Climate
3. Electro magnetic spectrum
4. Vertical layers of atmosphere
5. Role of relative humidity on crop production
6. Rain Vs. Dew
7. Agricultural seasons of Kerala
8. ENSO and Indian monsoon
9. Farmers' weather services
10. Saturation and actual vapour pressure
11. Cloud measurement
12. Global distribution of pressure

IV. Write short essays on ANY FOUR of the following   (4x5=20)

1. Green house gases and their role in global warming
2. Response of plants to PAR
3. Radiation balance
4. Weather and its relationship with diseases in agriculture
5. Climate related natural disasters
6. Spatial and temporal variation of air temperature

V. Write essays on ANY TWO   (2x10=20)

1. Rainfall mechanisms and types
2. Types of weather forecasting and their applications in agriculture
3. Climate change and agriculture

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