KERALA AGRICULTURAL UNIVERSITY

B.Sc (Hons.) Agriculture 2016 Admission Ist Semester Final Examination-March-2017

| Cat. No: Agmt 1101 Title: Introductory Agro-meteorology & Climate Change (1- | Marks: 50.00 +1) Time: 2 hours |
|--|-----------------------------------|
| I.Fill up the blanks | $(10 \times 1=10)$ |
| 1. The lowest layer of the atmosphere is called | (27.2.2.7) |
| 2. Weight of water vapour per unit volume of air is called - | |
| 3. Average value of environmental lapse rate is°C | per km. |
| 4. A visible aggregate of minute particles of water or ice or | both in free air is called |
| The difference between saturation vapour pressure and a termed | ectual vapour pressure is |
| 6. Sc and St belong to the family of clouds (low / s | middle / high). |
| 7 comprises upto 4 per cent of the atmosphere by | volume. |
| 8. The capacity of air to hold moisture with inc decreases) | rease in temperature (increases |
| 9. The science which deals with the study of atmosphere an | nd its various phenomena |
| İS | ₽ |
| 10 meteorology deals with the co-ordinated stu- atmosphere. | dy of the various process of the |
| I.Write short notes on ANY FIVE | $(5 \times 2 = 10)$ |
| 1. Macroclimate | |
| 2. Short wave radiation | |
| 3. Soil heat flux | |
| 4. Gradient wind | |
| 5. Photoperiodism | " |
| 6. Temperature inversion | |
| 7. PAR | |
| II. Answer any FIVE questions | (5 - 4 - 20) |
| With a sketch, briefly explain the standard atmospheric p | $(5 \times 4 = 20)$ |
| 2. Briefly explain the different forms of condensation. | ressure systems / bens. |
| 3. Write the scope and importance of agricultural meteorolo | iax |
| 4. Give a brief account of applications of remote sensing in | |
| 5. Write the significance of crop weather calendar and crop | |
| 6. Briefly discuss about the Ice-crystal theory of Bergeron. | mounter diagrams. |
| 7. Define condensation and explain its different forms. | * |

IV. Write Essay on ANY ONE

(1x10=10)

- 1. Discuss about the importance, types and applications of weather forecasting in agriculture.
- 2. Give a detailed account of weather and climate related natural disasters and their risk and management options.
