

P P SAVANI UNIVERSITY

First Semester of B.Sc. (Hons.) Agriculture End Semester Examination
July - 2022

SGAG 1050- Introductory Agro meteorology & Climate Change

20.06.2022, Wednesday Time: 10:00 a.m. to 12:00 a.m. Maximum Marks: 50

Instruction:

1. Draw a neat and labeled diagram whenever it is required.
2. Start new questions from new page.

Q.1 Multiple choice questions (01 mark each)

(15)

- 1.1 The percentage of CO₂ in the atmosphere is_____.
- | | |
|---------|---------|
| a. 0.03 | c. 0.5 |
| b. 0.3 | d. 0.05 |
- 1.2 Which sphere under present ozone layer?
- | | |
|-----------------|-----------------|
| a. Stratosphere | c. Mesosphere |
| b. Troposphere | d. Thermosphere |
- 1.3 _____ forecasts are valid for the period of next 3-7 days.
- | | |
|-----------------|-------------------|
| a. Short range | c. Long range |
| b. Medium range | d. Extended range |
- 1.4 _____ forecasting involves prediction of weather conditions over the entire crop growth period or season.
- | | |
|-----------------|------------------|
| a. Medium range | c. Long range |
| b. Short range | d. None of these |
- 1.5 _____ occurs when soil moisture and rainfall are inadequate during the growing season to support a healthy crop growth till maturity, causing extreme crop stress and wilt.
- | | |
|---------------------------|-------------------------|
| a. Agricultural drought | c. Permanent drought |
| b. Meteorological drought | d. Hydrological drought |
- 1.6 _____ is layer is called the "seat of all weather phenomena"
- | | |
|-----------------|-----------------|
| a. Mesosphere | c. Stratosphere |
| b. Thermosphere | d. Troposphere |
- 1.7 The outer most layer of the earth's atmosphere is names as the_____.
- | | |
|----------------|-----------------|
| a. Lithosphere | c. Thermosphere |
| b. Exosphere | d. Biosphere |
- 1.8 Albedo of Moist and dry black soils_____.
- | | |
|---------------|---------------|
| a. 14 to 17 % | c. 20 to 25 % |
| b. 8 to 14 % | d. 23 to 25 % |
- 1.9 Meteorology is _____ word.
- | | |
|----------|-----------------|
| a. Greek | c. Roman |
| b. Latin | d. Both A and B |

1.10 _____ is used to measure atmospheric pressure.

- a. Barometer
- b. Barograph
- c. Luxmeter
- d. Both A and B

1.11 _____ means the state of atmosphere at a given time and location.

- a. Weather
- b. Climate
- c. Both A and B
- d. None of these

1.12 The solid or land part of earth is called as _____.

- a. Lithosphere
- b. Hydrosphere
- c. Biosphere
- d. Atmosphere

1.13 Flow of the sea to land _____.

- a. Land Breeze
- b. Sea Breeze
- c. Mountain Breeze
- d. Valley Breeze

1.14 _____ filters U. V. radiations which harmful to life on earth.

- a. O₂
- b. O₃
- c. CO₂
- d. Water vapour

1.15 The polar region is an area of _____.

- a. Low pressure
- b. High pressure
- c. Neutral pressure
- d. Both A and B

Q.2 Define/ Explain (Attempt any six- 01 marks each)

(06)

- 2.1 Agro- meteorology
- 2.2 Weather
- 2.3 Evaporation
- 2.4 Isotherm
- 2.5 Hydrology
- 2.6 Drought
- 2.7 Condensation
- 2.8 Atmosphere

Q.3 True/False (01 marks each)

(05)

- 3.1 Climate means the state of atmosphere at a given time and location.
- 3.2 Air flow the land to sea is Land Breeze.
- 3.3 Sea breeze occurs in night time and land breeze occurs in day time.
- 3.4 Mountain breeze occurs in night time.
- 3.5 The lines joining places having equal atmospheric temperature on a geographical map is known as isotherm.

Q.4 Short notes (Attempt any six- 02 marks each)

(12)

- 4.1 Objectives of Agro-meteorology
- 4.2 Importance of atmosphere
- 4.3 Write about composition of atmosphere
- 4.4 Enlist the type of cloud
- 4.5 Enlist different form of condensation
- 4.6 Difference between Sea breezes and Land breezes
- 4.7 Enlist factor affecting Air temperature
- 4.8 Stratosphere

Q.5 Answer the following questions in detail (Attempt any three- 04 marks each)

(12)

- 5.1 South- West monsoon
- 5.2 Draw the diagram and explain of spheres of atmosphere?
- 5.3 What is wind? Explain type of wind?
- 5.4 Difference between Weather and Climate
- 5.5 Explain classification of drought
