

Dr. PANJABRAO DESHMUKH KRISHI VIDYAPEETH, AKOLA

SEMESTER END THEORY EXAMINATION

B. Sc (Hons.) Horticulture

Semester	:	I (New)	Term	:	I	Academic Year	:	2020-2021
Course No	:	H/AGROMET-111	Title	:	Agro-meteorology and Climate Change			
Credits		2 (1+1)						
Day & Date	:	17/07/2021, Saturday	Time	:	12.00-1.00	Total marks	:	40

Note:	1. Solve ANY FOUR questions from SECTION “A” . 2. Solve ANY SIX questions from SECTION “B” . 3. All questions from SECTION “C” are compulsory. 4. Send the PDF file of answer sheet to the email id of respective course teacher
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SECTION “A”

(Write the answers in 4-5 sentences only. Each question carries 4 marks)

- Q.1 Define agrometeorology and explain in short, its role in agriculture.
- Q.2 Define temperature. Elaborate in short physical structure of the atmosphere.
- Q.3 Define radiation. Write in short, the importance of radiation in crop production.
- Q.4 Define precipitation and elaborate in short, the forms of precipitation
- Q.5 Define wind. Write short note on cyclone and anticyclone

SECTION “B”

(Write the answers in one sentence only. Each question carries 2 marks)

- Q.6 **Define**
- Aerosols
 - Evapotranspiration
 - Weather
 - Relative humidity
 - Weather forecasting
 - Atmospheric pressure
 - Pollution

SECTION “C”

Q.7 **Choose the correct option. (Each question carry 1 marks)**

- Line joining the places of equal rainfall
 - Isotach
 - Isotherm
 - Isohyet
 - Isobar
- The atmospheric gas which acts as shield for UV radiation

- a) Oxygen b) Ozone c) CO₂ d) Nitrogen
- 3) The process by which water vapour directly converts into solid state is termed as.....
a) Evaporation b) Sublimation c) Condensation d) Transpiration
- 4) Agriculture drought occurs when
a) Rainfall < 75% of the normal b) Rainfall < 25% of the normal
c) Rainfall < 50% of the normal d) Soil moisture fall short to meet crop water demand
- 5) Medium range forecast valid for period
a) Less than 3 days b) 3 to 10 days c) More than 10 days d) None of these
- 6) The major parts of India receive rainfall from
a) NW monsoon b) SW monsoon c) NE monsoon d) SE monsoon
- 7) The value of dry adiabatic lapse rate is
a) $6.5^{\circ}\text{C km}^{-1}$ b) $7.5^{\circ}\text{C km}^{-1}$ c) $8.5^{\circ}\text{C km}^{-1}$ d) $9.8^{\circ}\text{C km}^{-1}$
- 8) Example of C₄ plants
a) Rice b) Wheat c) Sorghum d) Barley
- 9) The decrease in temperature with height is called
a) Lapse rate b) Inversion c) Potential temperature d) Unstable
- 10) Atmospheric pressure at mean sea level is Mb
a) 1012.325 b) 1013.325 c) 1014.325 d) 1015.325
- 11) Identify the vertical and heavy rain making cloud
a) Cumulonimbus b) Cirrus cumulus c) Alto-stratus d) Cirrus
- 12) Maximum or minimum soil temperature takes time to reach lower depths. This delay is known as..
a) Inversion b) Thermal lag c) Diversion d) Diffusivity