Seat No: _____

PARUL UNIVERSITY COLLEGE OF AGRICULTURE Hons.)Agriculture Summer 2021 - 22 Examination

Enrollment No: _____

B.Sc. (Hons.)Agriculture Summer 20)21	- 22	ł

Subject Code: 20101254 Ti	ate: 16/03/2022 ime: 10:30am to 1:00pm otal Marks: 50
Instructions	
1. All questions are compulsory.	
2. Figures to the right indicate full marks.	
3. Make suitable assumptions wherever necessary.	
4. Start new question on new page.	
Q.1 Do as Directed. A. Fill in the blanks. (Each of 0.50 marks)	(05)
1. Evaporation measured by	
Plants produce oxygen through	
3. India receive maximum rainfall by monsoon.	
4. Line joining the places having equal atmospheric pressure is known as	·
5. The shape of the earth is	
6. The natural source of water is	
7. The lowest layer of the atmosphere is	
8. The solid part dearth is known as	
9. The summer solstice occurs on	
10. The difference between SVP and AVP is known as	(10)
B. Multiple choice type questions. (Each of 0.50 mark)	(10)
1. What is solar constant on earth?	
a) 100 Langley b) 2.92 Langley	
c) 1.94 Langley d) 22 Langley	
2. What is the wavelength of visible solar radiation? $(100, 400, 700, m)$	
a) 100-400 nm b) 400-700 nm	
c) 100-150 nm d) 700-900 nm	
3. Solar radiation measured by	
a) Pyranometerb) Hygrometerc) Thermometerd) Barometer	
4. A certain part of energy received from the sun, is reflected back to space	a by the earth
 a) Transmission b) Albedo 	te by the cartin
	av of light to
5. By which process green plants and certain other organisms use the ener convert carbon dioxide and water into the simple sugar glucose?	gy of fight to
a) Transpiration b) Photosynthesis	
c) Detoxification d) Respiration	
6. Which instrument used for measure wind speed?	
a) Luxmeter b) Anemometer	
c) Barometer d) Wind Vane	
 Combination of Dry bulb and Wet bulb thermometer used for 	
a) Net radiation b) Cloud	·
c) Relative Humidity d) Gas Composition	
8. In which part of atmosphere the ozone layer located?	
a) Troposphere b) Stratosphere	
c) Mesosphere d) Thermosphere	
9. The percentage of water vapour in atmosphere by volume.	
a) 0-4% b) 20-30%	
c) 0.5-5.0 % d) 0-0.5%	

10. An aggregation of minute drops of water	suspen	ded in the air at higher altitud	le termed
as.			
a) Clouds		Frost	
c) Fog	d)	Haze	
11. 2^{nd} layer of atmosphere is			
a) Troposphere		Exosphere	
c) Stratosphere		Thermosphere	
12. Surface has the lowest albedo in visible rad			
a) Vegetation		Soil	
c) Water		Ice	
13. Secondary circulation of atmosphere over			
a) Easterlies		Cyclone and Anticyclone	
c) Westerlies		Land and sea breezes	
14. Clouds a type which gives the heavy and c	continu	ous precipitation	
a) Cumulus	b)	Cumulonimbus	
c) Nimbus	d)	Stratocumulus	
15. Heat flux which remains dominant over a o	dry bar	rren field is .	
a) Sensible		Ground	
c) Latent		Photosynthetic	
16. The earth is nearest to the sun is known as	,		
a) Aphelion		Equinoxes	
c) Perihelion		Vernal Equinoxes	
17. The sun is a	u)	verhar Equinoxes	
a) Star	b)	Satellite	
c) Planet		Sub planet	
18. CO ₂ content in the atmosphere is		Sub planet	
a) 3 ppm		30 ppm	
c) 300 ppm		3000 ppm	
19. Horizontal flow of air is called		Sooo ppin	
a) Convection	 b)	Current	
c) Wind	d)	Advection	
20. Which force zero at equator?	u)	Advection	
*	b)	Coriolia	
a) Centripetal	b)		
c) Centrifugal	d)	Pressure gradient	
Q.2 Do as Directed.			
A. Define the following. (Any five)			(05)
 Agro meteorology Latitude 			
3. Isotherm			
4. Primary circulation			
5. Atmospheric stability			
6. Relative humidity			
7. Dew			
B. Answer the following. (Any Five)			(05)
1. Give full form of WMO.			(00)
2. What is net radiation?			
3. Differentiate: Land breeze vs Sea breeze			
4. What is geostrophic wind?			
5. Enlist role of Nitrogen.			
6. What is Drought?			
7. What is condensation?			
Q.3 Write short notes. (Anyfive)			(10)
1. Explain climatic control factors.			(10)
2. Enlist importance of atmosphere.			
3. Differentiate: Weather Vs. Climate			
4. Describe radiation balance equation.			
5. Which conditions are necessary for condensati	ion?		
6. Enlist the different forms of condensation		plain any one in detail.	
7. Explain Indian monsoon.		r	
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Q.4 Attempt any Three/Long Questions/Example1. Explain different layers of atmosphere.

- 2. Explain different forces which control air motion.
- 3. Explain factors affecting the air temperature.
- 4. Describe climate change.