A **Reg. No. :** | | | | | | | | | | |

Question Paper Code: 99A07

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2021

Elective

Agricultural Engineering

19UAG907 - Design Of Greenhouse And Construction

(Regulation 2019)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Which of the following green house based on construction? CO1- R

   (a) Even span type (b) Polythene covered type

   (c) Glass covered green house (d) Wooden framed structure

2. The most potent greenhouse gas in terms of efficiency is_____. CO1- R

   (a) Nitrous oxide (b) Carbon di oxide (c) ChloroFluro Carbon (d) Methane

3. What is the best temperature for a greenhous_____^{0}C CO2- R

   (a) about 80-85 (b) about70-75 (c) about 65-70 (d) about 60-65

4. Actinometer is primarily used to measure…..and…...radiation. CO2- R

   (a) infrared and ultraviolet (b) visible and infrared

   (c) visible and ultraviolet (d) infrared and UV-A

5. LST stands for…… CO3- R

   (a) land surface temperature (b) local standard time

   (c) local solar temperature (d) low surface temperature

6. Micro irrigation is otherwise is known as CO3- R

   (a) tricle irrigation (b) localized irrigation (c) drip irrigation (d) both a,b,c

7. Irrigation frequency of drip irrigation varies from CO4- R

   (a) 1- 3days (b) 1-5 days (c) 1-7 days (d) 1-10 day

8. Emission uniformity of emitted varies upto CO4- R

(a) 75% (b) 80% (c) 90% (d) 100%

9. The time from sun rise to sun set termed as CO5- R

(a) slope (b) day length (c) local solar time (d) solar intensity

10. In which of the following is direct from of renewable energy CO5 -R

(a) solar energy (b) tidal energy (c) geothermal energy (d) bio energy

PART – B (5 x 2= 10Marks)

11. Define Greenhouse. CO1- R

12. List out the greenhouse structural components. CO2- R

13. Explain the distribution of solar radiation inside a greenhouse. CO3- R

14. What are the types of irrigation system? CO4- R

15. What are the components of surface drainage system? CO5- R

PART – C (5 x 16= 80Marks)

16. (a) Explain in detail about the type of greenhouse and shape with neat sketches. CO1- U (16)

Or

(b) Explain in detail about the scope and importance of greenhouse and list out the advantages and disadvantages. CO1- U (16)

17. (a) Explain in detail about the site selection of the greenhouse. its advantage and disadvantage. CO2 -U (16)

Or

(b) Explain the details about the greenhouse covering materials . its advantage and disadvantage. CO2 -U (16)

18. (a) Explain the details about the inside and outside greenhous radiation. CO3- U (16)

Or

(b) Explain the details about the thermal analysis of greenhouse CO3 -U (16)

19. (a) Explain the details about the types of irrigation methods. CO4- U (16)

Or

	(b)	Explain the details about the different types of filters	CO4 -U	(16)
20.	(a)	Explain the details about the surface drainage systems.	CO5- U	(16)
		Or		
	(b)	Explain the details about the subsurface drainage systems.	CO5- U	(16)