



KERALA AGRICULTURAL UNIVERSITY
B. Tech. (Agrl. Engg.) 2021 Admission
V Semester Final Examination – January 2024

I den.3107

Sprinkler and Micro Irrigation System (1+1)

Marks: 50
Time: 2 hours

- I Fill in the blanks (10x1=10)**
1. Sprinkler irrigation systems are usually classified according to the
 2. In sprinkler irrigation system, laying of main and lateral lines should start from the
 3. Friction loss in main line of large sprinkler irrigation system is normally allowed up to
 4. During operation of sprinkler irrigation system, maximum coverage attained when jet is emerges from the sprinkler at an angle of
 5. Uniformity coefficient of sprinkler irrigation system is affected by the
 6. The operating pressure of drip irrigation system is
 7. Pressure drop in laterals of drip irrigation system isin online and in inline emmitters.
 8. The hydrostatic pressure in micro tubes should withstandtimes the maximum operating pressure of the drip line.
 9. The discharge of any dripper may be expressed by therelation
 10.is the key to the success or failure of drip irrigation system.
- II Write short notes on ANY FIVE of the following (5x2=10)**
1. Write the difference between pressure compensating and non pressure compensating online emmitters.
 2. Write short note micro sprinklers?
 3. What is uniformity coefficient and how it is calculated in sprinkler irrigation system?
 4. Discuss about centre pivot system.
 5. Briefly discuss on clogging problem in drip irrigation system.
 6. Briefly explain on suction irrigation.
 7. Discuss on sub surface drip irrigation system and their adoptability.
- III Answer ANY FIVE of the following (5x4=20)**
1. What is fertigation and list the different types of filter used in drip irrigation system?
 2. Discuss the how capacity of sprinkler irrigation systems is calculated.
 3. Briefly explain different types of emmitters used in drip irrigation systems.
 4. Write about automation in drip irrigation systems.
 5. Write about factors influencing the efficiency of drip irrigation system.
 6. Briefly explain on boom and gun sprinkler irrigation system.
 7. Write about design of laterals in sprinkler irrigation systems.
- IV Write an essay on ANY ONE of the following (1x10=10)**
1. Discuss in detail about maintainance of sprinkler irrigation system.
 2. Discuss about components and their function of drip irrigation system.
