

B.Sc.(Hons.) Horticulture

Note :

1. Solve ANY EIGHT questions from SECTION 'A'.
2. All questions from SECTION 'B' are compulsory.
3. All questions carry equal marks.
4. Draw neat diagram wherever necessary.

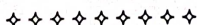
- Q.1 What are the factors influencing the water relation of plant and its growth?
- Q.2 What is Hydrologic Cycle? Explain in brief the process of hydrologic cycle.
- Q.3 Define Evapotranspiration. Discuss about potential evapotranspiration.
- Q.4 What is Sprinkler Irrigation? Enlist the different basic components of sprinkler irrigation system and give its advantages.
- Q.5 What is Drip Irrigation? Give the advantages of drip irrigation system and enlist the different components of drip irrigation system.
- Q.6 Enlist the different methods of irrigation. Discuss about border irrigation method.
- Q.7 A lateral has 12 sprinklers spaced 14 m apart. The laterals are spaced 20 m on the main line. Determine the amount of fertilizer to be applied at each setting when the recommended fertilizer dose is 80 kg/ha.
- Q.8 A Persian wheel discharges at the rate of 11,000 L per hour and works for 8 hours each day. Estimate the area commanded by the water lift, if the average depth of irrigation is 8 cm and irrigation interval is 15 days.
- Q.9 Discuss in brief about global water scenario.
- Q.10 Write short notes on:
 - a) Irrigation Period
 - b) Check Basin Irrigation

Q.11 Define the following terms:

- | | |
|-------------------------|-------------------------------|
| 1) Irrigation Frequency | 2) Net Irrigation Requirement |
| 3) Field Capacity | 4) Transpiration |

Q.12 Fill in the blanks:

- 1) _____ is called the heart of micro-irrigation system.
- 2) The most advanced and efficient practice of fertilization is _____.
- 3) Artificial application of water to the land is called _____.
- 4) _____ sprinkler heads are efficiently adopted to irrigate lawns and gardens.



Q.12 Fill in the blanks:

- 1) _____ is the first Plant Protection Advisor to the Government of India.
- 2) Epicranial suture is also called as _____.
- 3) Wing bearing thoracic segments of insects, is collectively called _____.
- 4) In housefly, the second pair of wings is modified into _____.
- 5) Hypognathous type of head is mainly observed in _____.
- 6) Chewing and lapping mouth parts are observed in _____ insect.
- 7) Apodous larvae are called _____.
- 8) Unicellular processes on insect body are called _____.

