

DEPARTMENT OF AI&DS, AI&ML, CSE & IT  
QUESTION BANK

SUBJECT CODE: 23CH6603

YEAR/SEMESTER: III/VI

SUBJECT NAME: WATER AND SOIL CONSERVATION

**UNIT-I WATER CONSERVATION**

This unit focuses on the short and long-term water harvesting techniques and sprinkle, drip and micro irrigation systems.

**PART-A**

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|---------------------------------|---|----|
| 1                               | Soil and water resources  | K1 |
| 2                               | What is soil? Mention any two important functions of soil.  | K1 |
| 3                               | What is soil erosion? State any two causes of soil erosion  |    |
| 4                               | Define water harvesting.  | K1 |
| 5                               | Better life styles require more fresh water. Justify your answer.   | K2 |
| 6                               | Explain the various techniques of water harvesting.   | K2 |
| 7                               | Write about rain water harvesting and state its objectives  | K1 |
| 8                               | Adopt a method for collecting rain water from roof of the building.   | K2 |
| Irrigation Principles:          |   |    |
| 9                               | What is irrigation? Why is irrigation needed for agricultural development?  | K1 |
| 10                              | Explain about irrigation engineering and irrigation development.  | K1 |
| 11                              | List out the advantages and disadvantages of irrigation.  | K2 |
| 12                              | How irrigation profoundly affects the vulnerability of the land to erosion?   | K2 |
| 13                              | What are the direct effects of deposition on the irrigation?  | K2 |
| 14                              | Choose some developmental parameters to maintain irrigation practices.  | K2 |
| 15                              | Outline the schemes for irrigation systems development and management?  | K2 |
| 16                              | Water irrigation management is important for crops.<br>Why? A   |    |
| 17                              | Irrigation process helps to revegetate disturbed soils in dry area. Elaborate.  | K2 |
| 18                              | List out some important water efficient irrigation system.  | K1 |
| Surface Irrigation              |   |    |
| 19                              | Which crops are suitable for surface irrigation?  | K1 |
| 20                              | What are the advantage and disadvantages of surface irrigation?   | K1 |
| 21                              | Justify why the surface irrigation is inefficient?  | K2 |
| 22                              | What are the factors that affect the efficiency of water usage in surface irrigation?   | K2 |
| 23                              | What type of surface irrigation is ideal for irrigating rice?   | K2 |
| 24                              | Sprinkler irrigation .Mention the advantages and disadvantages of Sprinkler irrigation.   | K1 |
| 25                              | Which crop is suitable for drip irrigation? What is the principle of drip irrigation?   | K2 |
| 26                              | Drip irrigation is a very efficient way to irrigate crops". Justify<br>Drip irrigation prevents erosion and nutrient runoff. Comment. | K2 |
| Micro irrigation:               |   |    |
| 27                              | Which irrigation is micro type irrigation? Justify it.  | K2 |
| 28                              | Mention the features of micro irrigation system.  | K2 |
| Benefits of Water Conservation: |   |    |
| 29                              | What are the benefits of water conservation?  | K1 |
| 30                              | Why should we conserve water?   | K2 |

**PART-B**

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|----|--|----|----|
| 1. | Explain the principles of rain water harvesting by Roof top method. Illustrate with an example.  | 16 | K2 |
| 2. | Discuss in detail about the water harvesting by Runoff method with its advantages.   | 16 | K4 |
| 3. | Elaborate in details about problems caused by deposition of sediments in irrigation system.  | 16 | K3 |
| 4. | Explain in brief about surface irrigation and its advantages and disadvantages.  | 8  | K2 |
| 5. | Explain the working of sprinkler irrigation system with a neat sketch.<br>How many types of sprinkler irrigation are there? Explain in detail. | 8  | K4 |
| 6. | Evaporation losses occurring in sprinkler irrigation but do not occur in drip irrigation. Justify and explain with the help of neat sketches.  | 16 | K3 |
| 7. | Discuss briefly the benefits as well as the ill effects of irrigation system.  | 8  | K2 |
| 7. | Give the difference between “Sprinkler Irrigation System” and “Drip Irrigation System”.  | 8  | K4 |
| 8. | Briefly explain about micro irrigation and its features and types.   | 10 | K2 |
| 8. | Write a detailed note on benefits of water conservation.   | 6  | K2 |

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