# Chapter-16

# WATER RESOURCES

#### VERY SHORT ANSWER TYPE QUESTIONS

### Q-1 Which are three sources of water?

Ans: Rainfall, surface water and groundwater.

# Q.2 What is the average annual rainfall in India?

**Ans:** 118 cm

# Q-3 How much water does India get from rainfall?

Ans: 40crore hectare meter

### Q.4 How much is the total quantity of annual water in all the rivers of India?

Ans: 18.7crore hectare meter

#### Q.5 What is the available water capacity of groundwater?

Ans: 433.9 billion cubic.

### Q.6 How much rainfall occurs in western parts of Rajasthan?

**Ans:** Average annual rainfall-10

# Q7 Which is the place of the highest rainfall in India and how much is its rainfall?

Ans: Mawsynram –average annual rainfall is 1187cm.

#### Q.8 Which are the three-main use of water?

Ans: Irrigation, household and industry.

#### Q9 How much water is consumed in manufacturing a car?

Ans: About one lake litre.

# Q10 What is the percentage of water used in power generation?

ANS: 3.6 per cent of total availability of water.

# Q11 How much was the average annual availability of water per capita in India in 2001?

Ans: 1829 cubic.

# Q12 State any three causes of the need of irrigation in India.

**Ans:** Indefinite rainfall, uneven distribution of rainfall; rainfall limited to few months, population growth.

# Q13 How much area of India was irrigated at the time of independence?

Ans: 2.26crore hectares.

# Q14 How much was the irrigated are by the end of tenth five year plan?

Ans: 9.88crore hectares.

# Q15 Which means are responsible for the highest irrigation in India?

Ans: Wells and tube wells.

# Q16 Which state/areas have the highest intensity of irrigation?

**Ans:** Kashmir valley, Western uttar Pradesh, Punjab, haryana, north Bihar, delta regions of Krishna and kaveri rivers and north-eastern Assam.

# Q.17 Which is the first priority of National agricultural water policy in the allocation of water?

Ans: Drinking water.

# Q18 How much water is wasted in flood irrigation?

Ans: More than 30 per cent.

#### Q19 Name three measure of water conservation.

**Ans:** Dams on rivers, recycling of polluted water, selected crops, efficient irrigation methods, use of pipe for irrigation, river basin transfer of water, harvesting rainwater.

### Q20 When did the modern rainwater harvesting program starts?

ANS: 1990-1991.

# SHORT ANSWER TYPE QUESTIONS

# Q18. It is said that the water resources in India have been depleting very fast. Discuss the factors responsible for depletion of water resources.

Ans. The factors responsible for the depletion of water in India are as follows:

- 1. Industrial effluents
- 2. Agricultural effluents
- 3. Domestic effluents

# Q19. What factors are responsible for highest groundwater development in the states of Punjab, Haryana, and Tamil Nadu?

**Ans.** The ground water utilization is very high in the states of Punjab, Haryana and Tamil Nadu. These states are advanced agricultural states. Water is used mainly in irrigation. The share of Agriculture sector in total water utilization is much higher than other sectors.

# Q20. What is rain water harvesting?

**Ans.** Rain water harvesting is a technique of increasing the recharge of ground water by capturing water reservoir to meet the demand of water for domestic purpose.

The main objectives of rain water harvesting are:

- 1. To meet the ever-increasing demand of water.
- 2. To reduce the run off which chokes drains.
- 3. To avoid flooding of roads.
- 4. To augment the ground water storage and raise the water table.
- 5. To reduce the underground water pollution.
- 6. To improve the quality of ground water.

### Q21. Describe the methods of conserving water resources.

**Ans.** Water is vital resource for the development of economic activities. Water should be conserved in the following ways:

- 1. Water of oceans, rivers and lakes should not be polluted.
- 2. It should be saved from urban waste and chemicals of industries.
- 3. It should be saved from urban waste and chemicals of industries.
- 4. It should be recycled to use it again.
- 5. Dams should be built across the rivers and lakes to store water in reservoirs.

# Q22. What is watershed management? Do you think it can play an important role in sustainable development?

**Ans.** Watershed management refers to efficient management refers to efficient management sand conservation of surface and groundwater resources. It is correct that it will play and important role in sustainable development.

- 1. It involves prevention of run off and storage and recharge of groundwater.
- 2. Watershed management includes conservation and judicious use of all resources.
- 3. It aims at bringing about balance between natural resources on the one hand and society.

4. Watershed development projects in some areas have been successful in rejuvenation environment and economy.

# Q23. Discuss the availability of water resource in the country and factor that determine its spatial distribution

Ans: -The factor which determine the spatial distribution are:-

1) Surface water resource: -There are four major source of surface water such as river, lakes, ponds and tanks. The mean animal flow in all rivers basis in India is estimated to be 1869 cubickm. Only 690 km of available surface water can be utilized.

2) Ground water resource: -The total replenishes able ground water resource in the country are about 432 cubic km Ganga and Brahmaputra have about 46%. of the total replenish able water in India.

3) Lagoons: - The state like Kerala, Orissa and West Bengal has surface water resources in the lagoons and lakes.