# 1. Answer the following questions in details :

### (1) State the remedies to conserve the water.

- Water is life so water is an inseparable organ of life. Water is such a resource which is directly associated with the entire living organisms.
- Available water is in limited quantity. Its distribution is also unequal so it is necessary to use the water economically and to conserve the available water.
- > Water is a national resource so remedies to conserve water to be done at different stages.
- > More construction of reservoirs for water storage should be done.
- > Connecting two river basins and bringing the ground water at higher level.

## (2) Describe the circumstances creating water crisis in India.

- Water shortage is constantly intensified due to increasing demand for grains by increasing population, to grow cash crops, increasing urbanization and changing life styles of people.
- The position of water supply and the inequality in the local distribution are challenges to human interests, livelihood and economic development.
- The quality of water is deteriorated in many villages and some towns. Many water borne disease spread due to this. E.g. Dry regions of West Rajasthan and internal parts of peninsular plateaue.
- Availability of pure potable water is the basic need of life. There is a large difference between the demand of water and its supply. Even though there is a severe storage of drinking water in about 8% towns in India. Work remains to provide clean drinkable water to about 50 % of villages of the country.
- There has been a large increase in the irrigation facilities in India. However 2/3 of agricultural region still depend on rain water.
- In recent times, the ground water level has gone down considerably due to more and more water is extracted through wells and tubewells.
- The country is facing severe problems as some states extract ground water in excess volume. Serious problems like reduction in the quality of water and increasing scarcity have to be faced.

Besides agriculture, water is used in industries in uncontrolled quantity. Main sources of water pollution are polluted water of domestic uses and industries.

## (3) Give information about rain water harvesting.

- > Rain water harvesting is a technique to increase capacity of ground water.
- Special methods to collect the rain and conserve it includes the construction of wells, small dams, khet talavadi etc. Water is conserved through these mediums. This also raises the ground water level.
- > This may fulfill the requirements of domestic use and agriculture.
- > Main objective of rain water harvesting.
- To increase the capacity to conserve the ground water and increase the underground water table.
- Reduce the water pollution.
- > Improve the quality of ground water.
- > To save the land routes from water logging.
- > Reduce the surface run off of water.
- Fulfill the requirement of domestic water requirements during summer and during long dry spells.
- > Fulfill the increasing demand of water.
- Make arrangement to store rain water in underground tanks in multistoreyed residence in large cities or arrangement should be made so that the water percolates in the ground.

## 2. Write to-the-point answers of the following questions :

### (1) State the importance ol'multi-purpose projects.

- The physiography of India is such that many rivers merge with other rivers and empty their water into the sea. With the idea that this water may be harnessed for various purpose, multi- purpose projects are planned on many rivers.
- > A multipurpose project means to solve various problems associated with river valleys.
- > Multipurpose project includes flood control, prevention of soil erosion, water for drinking

and irrigation industries, water provided to settlements, generation of electricity, internal water, transportation, entertainment, wild life protection and development of fisherys etc.....

### (2) Write about the distribution of irrigation.

- > There is a difference regarding the area under irrigation in every state.
- Coastal districts in Andhra Pradesh, delta regions of Godavri and Krishna rivers, Mahanadi delta in Odisha, Kaveri delta in Tamilnadu, Punjab, Haryana and Western Uttar Pradesh are regions of intensive irrigation of the country.
- After independence, the irrigated area in India has increased four times. Irrigation is practiced in about 38 % of net sown area.
- There is a difference in the irrigated area of different states. In Mizoram 7.3 % area of the total area sown is under irrigation. While it is 90.8% in Punjab.
- There is a vast difference between the total area under irrigation with the total area sown. More than 40 % area of the total area sown is under irrigation in Punjab, Haryana, Uttar Pradesh, Bihar, Jammu-Kashmir, Tamil Nadu and Manipur.
- There are three mediums of irrigation in India. (1) Well and Tubewell (2] Canals (3) Ponds.
  Out of these wells and canals are major mediums of irrigation.
- Canal irrigation is practiced in the vast plains of Satluj, Ganga and Yamuna and also in the delta regions of Mahanadi, Godavari, Krishna and Kaveri rivers in the Eastern plains. Wells and tube wells are very common in alluvial plains.
- > Irrigation by ponds is practiced more in the eastern and southern states.

## 3. Write answers for the following questions in brief:

- (1) State the uses of ground water.
- Ground water is maximum used for irrigation.

### (2) Which factors should be considered for water management '?

- > Irrigation by ponds is practiced more in the eastern and southern states.
- Irrigation is developed in the delta regions of Mahanadi, Godavari, Krishna and Kaveri rivers in the Eastern plains.

- Thus, among irrigation mediums agriculture carried out by irrigation through ponds is famous in South India.
- 4. Select the correct option from the options given for the following questions and write answer.

(1) Which is the main source of surface water?

(A) Rainfall (B) Ponds (C) Rivers (D) Lakes

(2) Connect the following multi-purpose projects with the beneficiary states and select the correct

### order.

- (1) Bhakhara—nangal (a) Bihar
- (2) Kosi (b) Punjab
- (3) Nagarjunsagar (c) Gujarat
- (4) Narmada (D) Andhra Pradcsh
- (A) (1 b): (2 a), (3 C): (4 d) (B) (1 b), (2 a): (3 d), (4 C)
- (C) (1 c1), (2 C), (3 b), (4 a) (D) (1 C), (2 d): (3 a), (4 b)

### (3) Which of the following statements is not true?

- (A) Compared to canals, the irrigation through wells and tube wells is more prevalent in india.
- (B) Himalay an rivers are called seasonal rivers.
- (C) Water which is percolated from the surface within the ground is called ground water.
- (D) Punjab and Haryana are leading states in irrigation.
- (4) Which of the statements regarding 'Khet Talavadi' presented in the classroom during the student'sdebate is true ?
- (A) Jay : It is an important source to obtain water for industries.
- (B) Yash : It is an important part of 'Grow more trees' movement.
- (C) Yug : It is a modern technique to increase soil erosion.
- (D) Daksh : It is a part of rainwater harvesting.

- (5) After arranging the following multi-purpose projects from North to South, which option seems
- to be correct '?
- (A) Chambal Valley, Bhakhara—nangal, Narmada Valley, Nagarjunsagar
- (B) Bhakhra-nangal, Nagarj unsagar, Narmada Valley, Chambal Valley
- (C) Nagarjunsagar, Chambal Valley, Narmada Valley, Nagarjunsagar
- (D) Bhakhra—nangal, Chambal Valley, Narmada Valley, Nagarjunsagar