Sustainable Management of Natural Resources

Previous Years' CBSE Board Questions

A. Why do We Need to Manage Our Resources?

MCQ

1. Switching off unnecessary lights and fans and repairing leaking taps correctly defines which terms of 5R's?
(a) Recycle
(b) Reuse
(c) Repurpose
(d) Reduce (2020)

VSA (1 mark)

2. "We need to manage our resources." List two reasons to justify this statement. (Delhi 2014)

3. List two items which can be easily recycled, but we generally throw them in the dustbins. (Al 2014)

SAI (2 marks)

4. How do advantages of exploiting natural resources with short term gains in mind differ from the advantages of managing our resources with a long- term perspective? (NCERT Intext, Delhi 2017)

5. Why is an equitable distribution of resources essential in a society? List two forces which are against such distribution. (NCERT Intext, Al 2017)

6. "Reuse is better than recycling of materials". Give reason to justify this statement. (Delhi 2016)

7. What is sustainable development? State its two main objectives. (Foreign 2016)

8. (a) Why do we need to manage our resources carefully?
(b) Why management of natural resources requires a long term perspective? (Delhi 2015)

9. What is meant by "sustainable management"? Why is reuse considered better than recycling? (Delhi 2015)

10. Everyone of us can do something to reduce our personal consumption of various natural resources. List four such activities based on 3R approach. (NCERT Exemplar, Delhi 2015)

11. Why is sustainable management of natural resources necessary? Out of the two-reuse and recycle-which, in your opinion is better to practise? Give reason. (AI 2015, 2014)

12. What is meant by three types of 'R' (3Rs) to save the environment? Explain with examples how would you follow the 3Rs in your school to save the environment. (Foreign 2015)

13. Write two advantages of sustainable management of natural resources. Out of the two - reuse and recycle - which is better and why? (Foreign 2015)

SA II (3 marks)

14. How can we help in reducing the problem of waste disposal? Suggest any three methods. (Delhi 2019)

B. Forests and Wildlife

MCQ

15. If vast tracts of forests are cleared and a single species of plant is cultivated, then this practice will promote
(a) biodiversity in the area
(b) monoculture in the area
(c) soil fertility
(d) preservation of the natural ecosystem.

16. The Reni village of Garhwal is famous for (2020 C)
(a) monocultures of pine, teak and Eucalyptus
(b) Chipko movement
(c) extensive biodiversity
(d) participation of local people in efficient management of forests. (2020) R

17. The major ill effect of monoculture practice in forests is on the
(a) biodiversity which faces large destruction

(b) local people whose basic needs can no longer be met from such forests
(c) industries
(d) forest department. (2020)

VSA (1 mark)

18. Name two industries based on forest produce. (2019)

SAI (2 marks)

19. Why are forests considered "biodiversity hot-spots"? List two ways in which an individual can contribute effectively to the management of forests and wildlife. (Delhi 2019, Delhi 2015)

20. What is meant by wildlife? How is it important for us? (Delhi 2017)

21. Management of forest and wildlife resources is a very challenging task. Why? Give any two reasons. (Delhi 2017)

22. Why must we conserve our forests? List two factors responsible for causing deforestation. (AI 2017)

23. State two advantages of conserving (i) forests, and (ii) wildlife. (NCERT, AI 2017)

24. Explain giving example where active involvement of local people lead to efficient management of forest. (Delhi 2016)

25. "What was Chipko Andolan"? How did this Andolan ultimately benefit the local people and the environment? (NCERT Exemplar, Al 2016)

26. Forests are "biodiversity hotspots". Justify this statement. (AI 2016)

27. List four stakeholders which may be helpful in the conservation of forests. (AI 2016)

28. List four causes of damage to forests. (Foreign 2016)

29. List four measures that can be taken to conserve forests. (Delhi 2015)

30. What is biodiversity? What will happen if biodiversity of an area is not preserved? Mention one effect of it. (AI 2015)

31. What is meant by biodiversity? List two advantages of conserving forests and wildlife. (NCERT Exemplar, Al 2015, Delhi 2014)

32. List two problems that may arise by planting trees of single variety over vast tracts of forest. (Foreign 2015)

33. List two criteria of measuring the biodiversity of an area. (Foreign 2014)

SA II (3 marks)

34. (a) Why should National parks be allowed to remain in their pristine form?
(b) Why is reuse of materials better than recycling? (AI 2019)
C. Water for All

MCQ

35. Which of the following are the aims of watershed management?
I. Soil and water conservation
II. Decrease the biomass production
III. Mitigation of droughts and floods
IV. Increase the life of the downstream dams and reservoirs
(a) II and III only
(b) I, III and IV
(c) III and IV only
(d) I, II and IV (2020 C)

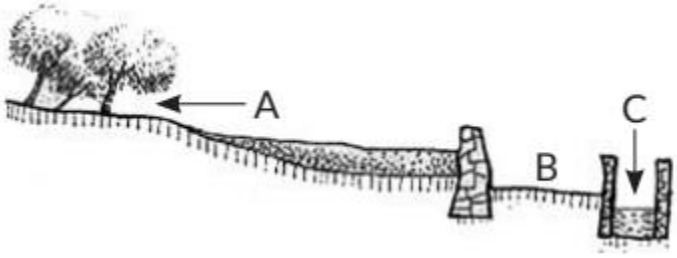
36. Which one of the following is not an advantage of building large dams?
(a) Adequate storage of water
(b) Generation of electricity
(c) Decrease in biological diversity
(d) Use in growth of water intensive crops (2020 C)

37. Consider the following criticisms that are generally addressed when a new project is launched:

I. Displacement of peasants and local tribals without compensation.
II. Swallowing up large amount of public money without any benefits.
III. Deforestation and loss of biodiversity. The criticisms about large dams in particular are
(a) I and II
(b) II and III
(c) I and III
(d) I, II and III. (2020)

38. Which one of the following is responsible for the sustenance of underground water?
(a) Loss of vegetation cover
(b) Diversion for high water demanding crops
(c) Pollution from urban wastes
(d) Afforestation (2020)

39. A diagram of traditional water harvesting system is given below:



The statement which defines the system and its parts is
(a) This is an ideal setting of the Khadin system and A = Catchment area; B = Saline area and C=Shallow dugwell.
(b) This is an ideal setting of the Shallow dugwell system and A = Catchment area; B = Saline area and C = Khadin.
(c) This is an ideal setting of Catchment area and A = Khadin, B = Saline area and C = Shallow dugwell.
(d) This is showing Saline area and A = Catchment area; B = Khadin and C = Shallow dugwell. (2020)

40. Bandharas and Tals are age old water harvesting concepts/structures found in
(a) Bihar
(b) Maharashtra
(c) Tamil Nadu
(d) Rajasthan. (2020)

41. Which of the following are water intensive crops?
(a) Wheat and rice
(b) Wheat and sugarcane
(c) Sugarcane and rice
(d) Wheat and gram (2020)

VSA (1 mark)

42. Mention the main social problem caused by building large dams. (2019 C)

43. Water is a valuable resource. List two ways that you would suggest every family member to save this resource. (Delhi 2014)

OR

List two measures that you would suggest for the better management of water resources. (NCERT Exemplar, Delhi 2014)

44. What is watershed management system? List two benefits derived by the communities that participate in this system. (NCERT Exemplar, Al 2014)

45. List two advantages of building dams. (Foreign 2014)

46. List two causes of pollution of river Ganga. (Foreign 2014)

SAI (2 marks)

47. List four advantages of water stored in the ground as "groundwater". (2019, Foreign 2015, 14)

48. Explain two main advantages associated with water harvesting at the community level. (NCERT Exemplar, Al 2017, Delhi 2015)

49. List four advantages of properly managed watershed management. (Delhi 2016)

50. What is water harvesting? How can this technique help in the conservation of water? (AI 2016, AI 2014)

51. The construction of large dams leads to social and environmental problems. List two problems of each category. (AI 2016)

52. List two main causes of the pollution of water of the river Ganga. State how pollution and contamination of the river water prove harmful for the health of the people of neighbouring areas. (Al 2015)

53. Building of big dams gives rise to some problems. List three main problems that may arise. Suggest a solution to any one of these problems. (Foreign 2015)

54. List four advantages of conserving water in the form of groundwater. (Foreign 2015)

SA II (3 marks)

55. What is water harvesting? List two main advantages associated with water harvesting at the community level. Write two causes for the failure of sustained availability of groundwater. (Delhi 2019)

56. What is dam? Why do we seek to build large dams? While building large dams, which three main problems should particularly be addressed to maintain peace among local people? Mention them. (2018)

57. (a) Water is an elixir of life, a very important natural resource. Your science teacher wants you to prepare a plan for a formative assessment activity. "How to save water, the vital natural resource?" Write any two ways that you will suggest to bring awareness in your neighbourhood on 'how to save water'
(b) Name and explain any one way by which the underground water table does not go down further. (Delhi 2017)

D. Coal and Petroleum

MCQ

58. The most poisonous product formed by incomplete combustion of fossil fuels is
(a) carbon dioxide
(b) nitrogen dioxide
(c) carbon monoxide
(d) sulphur dioxide. (2020)

59. Incomplete combustion of coal and petroleum
(A) increases air pollution
(B) increases efficiency of machines
(C) reduces global warming
(D) produces poisonous gases.
The correct option is
(a) (A) and (B)
(b) (A) and (D)
(c) (B) and (C)
(d) (C) and (D). (2020)

SAI (2 marks)

60. "Burning of fossil fuels results in global warming". Give reasons to justify this statement. (AI 2016)

61. List two products of combustion of fossil fuels other than carbon dioxide. What happens when combustion takes place in insufficient air? Name a greenhouse gas. (Foreign 2014)

SOLUTIONS

Previous Years' CBSE Board Questions

1. (d): Reduce means to minimise the use of various products and things, which are obtained directly or indirectly from natural resources, e.g., switching off unnecessary lights and fans reduce wastage of electricity.

2. We need to manage our natural resources because
(i) the resources of the earth are limited and (ii) the proper management of our resources ensures their equitable distribution.

3. Newspapers and tin cans are the two items that can be easily recycled, but we generally throw them in dustbin.

4. The advantages of exploiting resources with short term aim is to meet the immediate basic human needs. Short term exploitation of natural resources meets the current demand. It is beneficial for the present generation only whereas management of resources with long term perspective is aimed to fulfill the needs of future generations. Long term use of resources can be achieved through their sustainable use.

5. Equitable distribution of natural resources is necessary so that all and not just a handful of rich and powerful people use them. Two forces against equitable distribution of resources are:
(i) Industrialisation
(ii) Profit makers who want to make profit from these resources.

6. Reuse is better than recycling because the process of reuse does not require any energy as in the case of recycling. The reuse strategy comprises using

things again and again. For example, used envelopes can be used again to make notes.

7. Sustainable development can be defined as management of available resources and development of new techniques for use of natural resources to meet the changing basic human needs, at the same time preserving the resources for the need of future generations. The two main objectives of sustainable development are:
(i) To reduce the dependence on the conventional sources and adopt non-conventional sources of energy.
(ii) Evolving new technology and conserving natural resources.

8. (a) The resources of earth are limited and their demand is increasing day by day with ever growing population. So, we have to avoid their wastage and should properly manage, conserve and replenish our natural resources.
(b) Management of natural resources requires a long term perspective, so that they can last for generations to come and may not be merely exploited for short term gains.

9. Sustainable management means managing the use of natural resources in a way that they fulfill the needs of present generation and are also conserved for future generations. Reuse is considered better than recycling because reusing products reduces the amount of waste and saves energy needed to recycle it.

10. Activities which can reduce consumption of natural resources are as follows:
(i) If we take public transport instead of private transport to travel to our destinations, then it helps to reduce the use of fossil fuels.
(ii) Reusing the water used for washing vegetables, to water plants in the garden can help in saving water.
(iii) Repairing and reusing old mobiles, televisions, etc., help reduce consumption of natural resources.
(iv) Promoting the use of furniture made of metals, fabrics, etc., instead of wood can help to reduce the cutting of trees for making such items.

11. Sustainable management of natural resources is necessary because:
(i) The resources of the earth are limited and because of the rapid increase in human population, the demand for resources is increasing day by day. Proper management ensures that the natural resources are used judiciously so that

they fulfill the needs of present generation and also last for the generations to come.
(ii) It also takes into consideration long-term perspective and prevents exploitation of natural resources for short- term gains. The process of 'reuse' is better than that of 'recycling' because some energy is used to recycle old objects but no energy is required during reuse.

12. 3Rs to save the environment are reduce, recycle and reuse. For sustainable use of resources, the three Rs can be practised in school in following ways: Reduce: Switching off unnecessary lights and fans when not in use, avoiding wastage of food, closing of over flowing taps. Recycle Students should segregate the wastes generated in classroom and should discard them in separate dustbins for their proper disposal. Reuse: Certain items can be reused like old books should not be thrown instead can be given to junior students for their use.

13. Two advantages of sustainable management of natural resources are:
(i) It avoids unnecessary use of natural resources.
(ii) Benefits of the resources are conserved for present as well as future generations. Of the two, reuse and recycle, reuse is better because reusing an item helps to conserve energy that may be required to recycle it.

14. In our daily lives, we generate a lot of useless materials and discard them. The useless left over or discarded materials are termed as wastes. Disposal of waste materials is a global problem of high magnitude. Waste disposal literally means getting rid of wastes. We can help in reducing the problem of waste disposal by adopting following approaches:
(i) Reduce: This means that we can use less of the things or resources. For example, we can reduce the use of electricity by switching off unnecessary lights and fans or the use of water by turning off the tap while brushing or shaving. We can use both sides of paper, for writing,

do not waste food or take only that much food which we can finish, etc. Thus, by adopting such methods, we can reduce the problem of waste disposal to a larger extent.
(ii) Recycle: There are certain items such as plastic, clothes, paper, glass, metal, etc., in our houses which are usually thrown in the garbage when not of any use. This should not be practiced and we should try the practice of

recycling. We should segregate wastes into biodegradable (domestic sewage, livestock wastes, etc.) and non-biodegradable (plastics, glass, metals, etc.). The biodegradable wastes should be dumped into preplanned site to be converted into manure or landfilling. The non- biodegradable wastes should be sent to respective recycling units where these are remoulded and again put to use.
(iii) Reuse: The reuse strategy comprises using things again and again. For example, instead of throwing away used plastic bottles in which we buy various food items like jam or pickle, tea leaves, sweets, etc., we can use them for storing things in the kitchen. Mobile phones, camera, TV sets should be repaired when required instead of throwing them and getting new ones. Newspapers and magazines can be used to make envelopes and paper bags, etc.

15. (b) Monoculture refers to the growth of a single plant species over a large area of land.

16. (b)

17. (a)

18. (i) Timber industry and (ii) paper manufacturing industry are based on the forest produce.

19. Forests are reservoirs of biodiversity. They contain different species of plants, animals and all sorts of living organisms. Forests are also under severe threat due to habitat loss, climate change and extensive species loss. Hence, they are considered as biodiversity hotspots. Two ways in which individuals can contribute effectively to the management of forests and wildlife are:
(i) By protecting the natural habitats of wild animals by identification, breeding, nursing habitats of each species.
(ii) By planting trees and by maintaining the wildlife protected areas.

20. Life in any form (plants or animals), which exists in its natural habitat is called wildlife. Wildlife is very important for us, as it provides ecological stability by maintaining the food chain. Wildlife is important to us in following ways:
(i) Wildlife is a renewable source of large variety of commercial products like food, fur, lac, musk, leather, feather, ivory, timber, fibre, fodder, fuel, medicines, etc., which can be used from time to time.

(ii) Wildlife is considered as gene bank, which can be used for producing high yielding plants and animals through the process of selection and hybridisation.
(iii) The wildlife can be used commercially to earn money through tourism (jungle safari, etc.) as it provides best means of sports and recreation.

21. Management of the forest and wildlife resources is considered as a challenging task as there are many stakeholders of forest. These stakeholders are directly or indirectly involved in forest and wildlife resources. This is a very challenging task due to following two reasons:
(i) Due to industrialisation and urbanisation, forest resources are depleting.
(ii) There is a lack of public awareness.

22. We must conserve our forests as they are useful resources. Forests are useful to us in many ways: (i) They provide living places (natural habitats), shelter, protection and food to our wildlife. (ii) They provide timber for making furniture, houses, boats and other useful things of daily use. (iii) They provide raw materials for paper, rayon and many other industries. (iv) They are the rich source of many other things like honey, lac, medicines, dyes, katha, sandalwood, spices, etc. (v) They help in maintaining a balance of gases like CO_2 and O_2 in the atmosphere, etc.
Two main reasons for deforestation are as follows:
(i) Indiscriminate felling of trees for the purpose of timber, fuel and industrial demand of wood, building dams, etc.
(ii) Over-grazing by a large livestock population.

23. (i) Two advantages of conserving forests are:
(a) Forests provide us a number of valuable goods such as wood, spices, rubber, etc.
(b) Forests help to reduce atmospheric pollution. They absorb CO_2, collect suspended particles and reduce noise.
(ii) Two advantages of conserving wildlife are:
(a) Wildlife helps keep the food chain in place and thereby maintain ecological balance of nature.
(b) Wild animals are a source of valuable products like ivory, honey, musk, etc.

24. Active participation of public and their support must be generated in order to conserve our forests and wildlife to achieve the real goal of eco-

development. An example of public participation in conservation of forest and wildlife is the case of the Bishnoi Community in Rajasthan. In 1731, Amrita Devi Bishnoi sacrificed her life along with 363 others for the protection of 'Khejri' trees in Khejarli village near Jodhpur in Rajasthan.

25. Chipko movement is also known as Hug the Trees Movement. In India this movement became a turning point for forest conservation efforts. It originated in Reni village of Garhwal. To stop the contractor from felling of trees women of the village clasped to the trunk of the tree.

Its benefits were as folllows:

(i) Existing forest cover was protected, reducing landslides and soil erosion. It actually protected environment and maintained ecological balance.
(ii) It forced the government to rethink their priorities in the use of forest produce and include the local people in forest management.

26. Forests are reservoirs of diversity. They contain different species of plants, animals and all sorts of living organisms. Forests are also under severe threat due to habitat loss, climate change and extensive species loss. Hence, they are considered as biodiversity hotspots.

27. Major stakeholders of forest resources include:
(i) Local people
(ii) The Forest department of the Government
(iii) The Industrialists
(iv) The nature and wildlife enthusiasts.

28. Four causes of damage to forests are:
(i) Increasing human population necessitates the expansion of human habilitation which requires clearing of forests to make more land available for residential purposes.
(ii) Rapid industrialisation also mandates setting up of new factories. Land for factory set up is also made available by clearing forests.
(iii) Ever increasing human population increases the demand of fresh supply of wooden furniture and other items for which trees are cut.
(iv) Forest fires resulting from mishandling of inflammable objects, left unattended campfire, negligently discarded cigarettes, etc., by humans causes damage to forests on a large scale.

29. Measures to conserve forests are:
(i) Afforestation - Plantation of trees to meet basic needs.
(ii) Instead of cutting trees for fuel wood we should use alternative sources of energy such as biogas.
(iii) By adopting agro and urban forestry methods.
(iv) By limiting human interference such as settlement, cropping, recreation, etc.

30. Biodiversity refers to the variety and variability of living organisms on earth or in a particular habitat. Biodiversity forms the foundation of the vast array of ecosystem services (pollination, food, timber, spices, etc.) that critically contribute to human well being. Biodiversity boosts ecosystem productivity where each species, no matter how small, has an important role to play. Hence, biodiversity is required for maintaining ecological balance. Loss of biodiversity will disturb ecological balance and create an ecological imbalance. Moreover, it will deprive humans of some important ecological services.

31. Biodiversity refers to the variety and variability of living organisms on earth or in a particular habitat. Two advantages of conserving forests are:
(a) Forests provide us a number of valuable goods, i.e., wood, spices, rubber, etc.
(b) Forests help to reduce atmospheric pollution. They absorb CO_2, collect suspended particles and reduce noise. Two advantages of conserving wildlife are:
(a) Wildlife helps keep the food chain in place and thereby maintain ecological balance of nature.
(b) Wild animals are a source of valuable products like ivory, honey, musk, etc.

32. Two major problems that may arise by planting trees of single variety over a vast tract of forest are:

(ii) Varied need of the local people will not be fulfilled.

33. The basic criteria of measuring the biodiversity of an area are:
(i) The presence of varied number of organisms and the type of ecosystem present in the area.
(ii) Indicator organisms are also a measure of biodiversity.

34. (a) National parks are the areas maintained by government and are reserved for betterment of wildlife. It is a place where cultivation, grazing, forestry, habitat manipulation and other activities are restricted. They are allowed to remain in their pristine form because they contain highest biological diversity, natural habitats for many wild animals, flora and fauna. National parks are essential for stability of ecosystem and having influence on health and social prosperity. If these parks will not remain in their pristine form, then the sustainable benefits for the present as well as future strategies will not be obtained. We can easily harvest useful genes to develop high yielding plants and animals to remain them in their pristine form because population recovers in natural habitat.
(b) Reuse is better than recycling because the process of reuse does not require any energy as in the case of recycling. The reuse strategy comprises using things again and again. For example, newspapers and magazines can be used to make envelopes.

35. (b) The aims of watershed management are soil and water conservation in order to increase biomass production.

36. (c) Large dams have led to the extinction of many fishes and aquatic species. Dam construction causes decrease in biological diversity.

37. (d)

38. (d)

39. (a) The given structure is representing a Khadin system. It is a traditional water harvesting system where A, B and C represents catchment area, saline area and shallow dugwells respectively.

40. (b)

41. (c)

42. The construction of large dams causes displacement of several tribals and peasants without adequate compensation.

43. Water is a valuable resource and to save it, there are two suggestive methods:
(i) Preventing wastage of water, in household by turning off tap when not in use while brushing, shaving, etc., and in public places.

(ii) Promoting reusing water like water used for washing vegetables can be reused for watering garden plants.

44. Watershed management is the scientific study of soil and water conservation in order to increase the biomass production. Benefits derived from watershed management are:
(i) It identifies degraded area of land and emphasises the need of the improvement of quality and quantity of clean water to the local community and thus ensures their participation.
(ii) Construction of a series of long trenches and mounds to hold rainwater and allow it to percolate into the ground, thus increasing the groundwater.

45. Two advantages of building dams are:
(i) It helps in irrigation.
(ii) It helps to generate electricity.

46. The two causes of pollution of river Ganga are:
(i) Increasing human activities like bathing, washing clothes, bathing of animals in river water.
(ii) Dumping of industrial wastes and ashes of corpses which are cremated in the water of river Ganga.

47. Four advantages of conserving water in the form of groundwater are:
(i) It does not evaporate, hence can be used for longer time.
(ii) It provides moisture for vegetation over a large area.
(iii) It remains protected from contamination and hence is fit for human consumption.
(iv) Groundwater does not become a breeding site for mosquitoes.

48. Two advantages of water harvesting at community level are:
(i) Water can be used for irrigation.
(ii) Water can be used to recharge wells and to raise the water table.

49. Four advantages of properly managed watershed management are:
(i) It increases the crop production.
(ii) It increases the income of the watershed community.
(iii) It reduces the menace of drought and floods.
(iv) It enhances the life of downstream dams and reservoirs.

50. Water harvesting is the technique used to capture and store rainwater for future use by making special water harvesting structures. Properly stored rainwater can be used for human consumption, irrigation and can be used to raise the water table. Hence, it helps in the conservation of water.

51. Social and environmental problems that arise due to building of dams are:
(a) Social problems:
(i) People residing in the area where dam is being built are rendered homeless.
(ii) Unequal distribution of water is another social problem.
(b) Environmental problems:
(i) Deforestation
(ii) Loss of biodiversity

52. Two main causes of pollution of water of river Ganga are:
(i) Human activities like bathing and washing clothes in the river water makes the water dirty.
(ii) Dumping of materials used in religious rituals like objects of worship (idols, sticks, flowers, sweets, plates made of banana leaves, etc.) as well as dumping ashes generated after cremation of dead bodies also pollutes river water. Such contaminated and polluted river water poses various health hazards to the people living nearby. It contains various pathogenic microbes that cause diseases like typhoid, cholera, jaundice, etc., in the people who consume it. Bathing in such water can cause various skin diseases in humans.

53. The three problems which arise due to construction of big dams are:
(i) Social problems: Building of dams displacement of large number of local people without sufficient compensation and rehabilitation.
(ii) Economic problems: Large amount of money is used for construction of dams.
(iii) Environmental problems: Construction of dams leads to enormous deforestation and loss of biodiversity. A proper compensation must be given to the local people who are rendered homeless due to building of the dam.

54. Refer to answer 47.

55. Water harvesting is the technique used to capture and store rainwater for future use by making special water harvesting structures.
Two advantages of water harvesting at community level are:

(i) Water can be used for irrigation.
(ii) Water can be used to recharge wells and to raise the water table.
Two causes for the failure of sustained availability of groundwater are:
(i) Loss of vegetation cover.
(ii) Pollution from industrial effluents and wastes.

56. Dams are large water storing bodies usually built across the river to hold and regulate the flow of water. After independence, emphasis was laid on construction of large dams because large dams served dual purpose- storage of huge amount of water and help in generation of electricity. From the dams, bigger canals and smaller canals are connected to supply water to the needy areas. The three problems which arise due to construction of big dams are as follows:
(i) Building of dams causes displacement of large number of local people without sufficient compensation and rehabilitation. A proper compensation must be given to the local people who are rendered homeless due to building of the dam.
(ii) Mismanagement and non-equitable distribution of water from canals leads to discontentment of local people who live farther downstream from the dam.
(iii) Construction of dams leads to enormous deforestation and loss of biodiversity directly or indirectly affecting the local people who depend mainly on the forests and its products for their livelihood.

57. (a) Water is an important vital natural resource. Freshwater constitutes only a small proportion of total quantity of water present on earth. However, proper management can lead to conservation of this important renewable resource. It can be preserved by the following ways:
(i) Taps must be closed after use.
(ii) Water used for washing clothes, etc., can be reused to wash car and for other purposes.
(iii) Water discarded from RO purifier can be used to wash vegetables.
(b) By use of water harvesting technique, underground water can be recharged. It includes digging small pits and lakes, building small earthen dams, constructing sand and limestone reservoirs and setting up roof top water collecting units. The water from trenches and pits seeps into deeper layer recharging groundwater levels.

58. (c)

59. (b)

60. Burning of fossil fuels releases harmful gases like carbon dioxide, carbon monoxide, oxides of nitrogen and sulphur. Of these gases, carbon dioxide is a greenhouse gas, because it traps sun's heat and keeps earth warm and hospitable. Excess of this gas results in enhanced greenhouse effect causing increase in mean annual temperature of earth (global warming).

61. Two products of combustion of fossil fuels other than carbon dioxide are sulphur dioxide and nitrogen oxides. In insufficient air, combustion of fossil fuel produces carbon monoxide. Carbon dioxide is a greenhouse gas.