

Case Study 16.06.2025

Answer Key

(i) Renewable energy is helping India to

Answer : (b) ensure sustainable development

(ii) Hydroelectric dams are also helpful in

Answer: (b) controlling floods

(iii) In the line, "EVs are revolutionizing the transport industry," the word revolutionizing refers to:

Answer: (b) creating remarkable transformation

(iv) Based on your understanding of the passage, choose the option that lists the uses of renewable energy.

Answer: (c) 1, 3, and 5

(v) Select the option that is true for the two statements given below.

1. Hydroelectric dams provide irrigation facilities.

2. Electric vehicles reduce fuel dependency.

Answer: (c) 1 is independent of 2

(vi) Biogas plants are most useful for

Answer: (b) rural energy generation

(vii) Which of the following represents the role of energy conservation?

Answer: (b) Decreasing energy costs and resource dependency

(viii) Which of the following benefits does waste-to-energy plants provide?

Answer: (b) Converting municipal solid waste into electricity

(ix) Biofuels are primarily derived from:

Answer: (c) crops like sugarcane and jatropha

(x) The Jawaharlal Nehru National Solar Mission aims to:

Answer: (c) generate 100 GW of solar energy

(xi) Assertion (A): Hydroelectric dams can control floods and provide irrigation facilities.

Reason (R): Dams regulate water flow and store excess water during monsoons.

Answer: (a) Both A and R are true, and R is the correct explanation of A.

(xii) Assertion (A): Electric vehicles help in reducing air pollution in urban areas.

Reason (R): Electric vehicles do not emit greenhouse gases during operation.

Answer: (a) Both A and R are true, and R is the correct explanation of A.

(xiii) Assertion (A): Biogas plants provide clean energy solutions for rural households.

Reason (R): Biogas production relies on fossil fuels for energy conversion.

Answer: (c) A is true, but R is false.

(xiv) Why is energy conservation significant for India?

Answer: (b) It promotes long-term sustainability and cost reduction

(xv) Which of the following is a direct result of promoting electric vehicles?

Answer: (b) Reduction in fuel dependency and air pollution