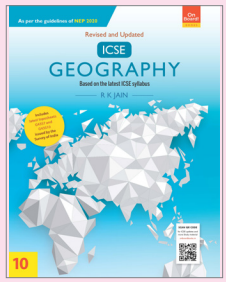
ICSE Geography

Class 10



Multiple-Choice Questions

CHAPTER 12 - India – Energy Resources (Non-Conventional)

1. Which renewable energy source is generated from the movement of water?
   a. Wind energy
   b. Solar energy
   c. Tidal energy
   d. Geothermal energy

   Answer: (c) Tidal energy

2. Which of the following is a disadvantage of fossil fuels compared to renewable energy sources?
   a. Fossil fuels are abundant and easy to access.
   b. Fossil fuels are cleaner than renewable energy sources.
   c. Fossil fuels are renewable.
   d. Fossil fuels produce harmful emissions and contribute to climate change.

   Answer: (d) Fossil fuels produce harmful emissions and contribute to climate change.

3. Match the following.

Column A	*Column B*
A. Device used to convert wind energy into mechanical energy	1. Solar dryer
B. Material used to make solar photovoltaic cells	2. Windmill
C. Solar device used for drying grains, fruits, and vegetables	3. Solar photovoltaic cell
D. A device which can convert solar energy into electricity	4. Silicon

   a. A–1, B–3, C–2, D–4
   b. A–2, B–1, C–4, D–3
   c. A–3, B–4, C–1, D–2
   d. A–1, B–2, C–3, D–4

   Answer: (c) A–3, B–4, C–1, D–2

4. What is the main focus of the biogas plant installation program in India?
   a. Installing biogas plants in urban areas
   b. Installing large-scale biogas plants in industries
   c. Installing biogas plants in individual houses and farms in rural areas
   d. Installing biogas plants in public transportation

   Answer: (c) Installing biogas plants in individual houses and farms in rural areas

5. What are the radioactive elements found in the monazite sands of Kerala shores?
   a. Uranium and thorium
   b. Uranium and coal
   c. Thorium and coal
   d. Coal and thorium

   Answer: (a) Uranium and thorium

6. What is the potential risk associated with nuclear energy?
   a. It is expensive.
   b. It produces harmful radiation.
   c. It is not a renewable energy source.
   d. None of the above.
   Answer: (b) It produces harmful radiation.

7. Match the following.

Column A	*Column B*
A. Indian state with potential of the largest solar cooker program	1. Himachal Pradesh
B. Highest wind potential in India	2. Rajasthan
C. Geothermal power plant	3. Rawatbhata
D. Nuclear power station	4. Gujarat

   a. A–3, B–1, C–2, D–4
   b. A–1, B–2, C–3, D–4
   c. A–4, B–3, C–1, D–2
   d. A–2, B–4, C–1, D–3
   Answer: (d) A–2, B–4, C–1, D–3

8. Which of the following cities in India has a training centre for biogas production?
   a. Kolkata
   b. Delhi
   c. Mumbai
   d. Coimbatore
   Answer: (d) Coimbatore

9. What are hot spots?
   a. Places on Earth where magma is deep underground.
   b. Places on Earth where the weather is always hot.
   c. Places under the Earth's surface where hot magma is close to the surface.
   d. None of the above.
   Answer: (c) Places under the Earth's surface where hot magma is close to the surface.

10. Match the following.

Column A	*Column B*
A. Geothermal energy	1. Generate nuclear energy
B. Non-conventional energy	2. Pollution-free source of energy
C. Nuclear Fission	3. Closed-tank system that uses microorganisms to break down
D. Digester tank	4. Energy derived from sources other than fossil fuels or nuclear power

   a. A–2, B–4, C–1, D–3
   b. A–4, B–3, C–1, D–2
   c. A–3, B–1, C–4, D–2
   d. A–1, B–3, C–2, D–4
   Answer: (a) A–2, B–4, C–1, D–3

11. Study the following map and answer the questions that follow.

11.1 Identify the state in India where the Kaiga nuclear power station is located.

a. Maharashtra
b. Kerala
c. Karnataka
d. Uttar Pradesh

Answer: (c) Karnataka

11.2 Where were the first two nuclear reactors commissioned in India?

a. Rawatbhata
b. Tarapur
c. Kalpakkam
d. Narora

Answer: (b) Tarapur

12. What is the main technology used to convert solar energy into electricity?

a. Wind turbines
b. Hydroelectric power plants
c. Nuclear power plants
d. Solar panels

Answer: (d) Solar panels

13. Match the following.

Column A	*Column B*
A. Concave reflector	1. Requires no raw material
B. Tidal energy	2. Requires high initial investment
C. Biogas	3. Solar furnace
D. Windmill	4. Generation of motive power

a. A–3, B–2, C–1, D–4
b. A–1, B–4, C–3, D–2
c. A–2, B–3, C–4, D–1
d. A–4, B–1, C–2, D–3

Answer: (a) A–3, B–2, C–1, D–4

14. What is the main advantage of tidal energy?
a. It does not require any infrastructure to be built.
b. It is a renewable source of energy.
c. It is cheap to produce.
d. It does not have any environmental impact.

Answer: (b) It is a renewable source of energy.

15. What is the composition of biogas?
a. 56% methane, 40% carbon monoxide, 4% other gases
b. 56% methane, 40% carbon dioxide, 4% other gases
c. 56% methane, 40% oxygen, 4% other gases
d. 56% methane, 40% nitrogen, 4% other gases

Answer: (b) 56% methane, 40% carbon dioxide, 4% other gases

16. What percentage of India's renewable energy capacity is contributed by wind energy?
a. 35%
b. 50%
c. 65%
d. 80%

Answer: (c) 65%

17. Which country is the largest producer of solar energy in the world?
a. United States
b. Germany
c. China
d. Japan

Answer: (c) China

18. What is the name of the process by which solar energy is converted into electricity in a solar panel?
a. Photovoltaic effect
b. Electromagnetic radiation
c. Nuclear fusion
d. Wind power

Answer: (a) Photovoltaic effect

19. What is gobar gas?
a. Biogas produced from organic waste other than cow dung
b. A type of biogas plant used in India
c. Biogas produced from cow dung
d. The leftover slurry from biogas production

Answer: (c) Biogas produced from cow dung

20. What is the primary source of India's nuclear fuel resources?
a. Uranium and thorium in the monazite sands of Kerala
b. Coal deposits in Madhya Pradesh
c. Natural gas reserves in Gujarat
d. Solar energy in Rajasthan

Answer: (a) Uranium and thorium in the monazite sands of Kerala