

LATIHAN KENDIRI ON RENEWABLE ENERGY

1. Which of the following is a key advantage of nuclear power in renewable energy?

- A. Zero carbon emissions during operation
- B. No radioactive waste
- C. Low initial cost
- D. Unlimited fuel supply

 Answer: A

Explanation: Nuclear power produces zero carbon emissions during operation, making it environmentally friendly.

2. What component of a wind turbine captures wind energy?

- A. Gearbox
- B. Rotor blades
- C. Generator
- D. Tower

 Answer: B

Explanation: Rotor blades capture the kinetic energy of the wind and convert it into mechanical energy.

3. Which factor most affects the efficiency of solar panels?


- A. Sunlight intensity
- B. Panel color
- C. Wind speed
- D. Altitude

 Answer: A

Explanation: Sunlight intensity directly impacts how much energy solar panels can generate.

4. What is a common challenge associated with nuclear energy?

- A. Intermittent energy supply
- B. Radioactive waste management
- C. Low energy output
- D. High greenhouse gas emissions

 Answer: B

Explanation: Managing radioactive waste is a major challenge in nuclear energy production.

5. Which renewable energy source is most dependent on geographic location?

- A. Wind
- B. Solar
- C. Hydropower
- D. Nuclear

 Answer: C

Explanation: Hydropower requires specific geographic features like rivers or dams to generate energy.

6. What is the primary benefit of using renewable energy sources?

- A. No maintenance required
- B. Unlimited power output
- C. Reduced environmental impact
- D. Lower upfront costs

 Answer: C

Explanation: Renewable energy sources reduce environmental impact by lowering emissions and pollution.

7. Which part of a solar panel converts sunlight into electricity?

- A. Mounting system
- B. Glass cover

- C. Metal frame
- D. Silicon cells

✓ Answer: D

Explanation: Silicon cells are the active components that convert sunlight into electrical energy.

8. What is a major advantage of wind energy?

- A. High carbon emissions
- B. Low operating costs
- C. Constant energy supply
- D. No land use

✓ Answer: B

Explanation: Wind energy has low operating costs once turbines are installed and running.

9. Which of the following is NOT a renewable energy source?

- A. Coal
- B. Wind
- C. Solar
- D. Hydropower

✓ Answer: A

Explanation: Coal is a fossil fuel and not considered a renewable energy source.

10. How does renewable energy help combat climate change?

- A. By reducing greenhouse gas emissions
- B. By storing carbon underground
- C. By cooling the atmosphere
- D. By increasing fossil fuel use

✓ Answer: A

Explanation: Renewable energy reduces greenhouse gas emissions, helping to mitigate climate change.