



**1. What percentage of the world's electricity is generated from solar energy?**

- a) 1%
- b) 5%
- c) 10% (Correct)

**2. What is the average lifespan of a solar panel?**

- a) 10 years
- b) 25 years (Correct)
- c) 50 years

**3. What are the main components of a typical residential solar energy system?**

- a) Wind turbine, batteries, inverter
- b) Solar panels, inverter, batteries (Correct)
- c) Hydroelectric generator, solar panels, inverter

**4. How does net metering benefit homeowners with solar panels?**

- a) Provides free maintenance for solar panels
- b) Allows homeowners to sell excess electricity to the grid (Correct)
- c) Increases the initial cost of installing solar panels

**5. Which country is the largest producer of solar energy in the world?**

- a) China (Correct)
- b) United States
- c) Germany

**6. What are some common types of green building features that promote energy efficiency?**

- a) Incandescent lighting, single-pane windows, concrete walls
- b) LED lighting, double-pane windows, insulation (Correct)
- c) Halogen lighting, aluminum windows, uninsulated walls

**7. What is the difference between passive solar design and active solar systems?**

- a) There is no difference
- b) Passive solar design uses architectural elements to collect and distribute solar like solar panels and pumps (Correct)
- c) Passive solar design is only used in commercial buildings, while active solar systems are for residential buildings

**8. What are the advantages of using solar energy compared to traditional fossil fuels?**

- a) Solar energy produces greenhouse gases
- b) Solar energy is renewable, clean and reduces air pollution (Correct)
- c) Solar energy is more expensive than fossil fuels

**9. How does the concept of the "green roof" contribute to energy efficiency and environmental sustainability?**

- a) Green roofs increase heat absorption and energy consumption
- b) Green roofs reduce heat absorption, provide insulation, and reduce stormwater runoff (Correct)
- c) Green roofs have no impact on energy efficiency or environmental sustainability

**10. What are some innovative technologies being developed to improve the efficiency and affordability of solar energy?**

- a) Coal-powered solar panels
- b) Thin-film solar cells, solar shingles, and solar tracking systems (Correct)
- c) Diesel-powered