

UNIT-III WIND ENERGY**Fill in the Blanks**

1. Wind energy is produced due to the motion of _____.
Answer: Air
2. The main cause of wind is uneven heating of the _____.
Answer: Earth's surface
3. The device used to convert wind energy into electrical energy is called a _____.
Answer: Wind turbine
4. Wind energy is a _____ source of energy.
Answer: Renewable
5. The unit of wind speed is _____.
Answer: m/s (meter per second)
6. The rotating part of a wind turbine is called _____.
Answer: Rotor
7. The height of the wind turbine tower affects the _____ of wind.
Answer: Speed
8. The energy available in wind depends on the _____ of wind speed.
Answer: Cube
9. Wind farms are usually located in areas with high _____.
Answer: Wind velocity
10. The instrument used to measure wind speed is called _____.
Answer: Anemometer

Multiple Choice Questions (MCQs)

1. Wind energy is a form of:
A) Non-renewable energy
B) Renewable energy
C) Nuclear energy
D) Chemical energy
Answer: B) Renewable energy
2. Wind is primarily caused by:
A) Earth's rotation only
B) Uneven heating of Earth's surface
C) Ocean tides
D) Gravity
Answer: B) Uneven heating of Earth's surface
3. Which device converts wind energy into electricity?
A) Solar panel
B) Turbine
C) Generator
D) Wind turbine
Answer: D) Wind turbine
4. The unit of wind speed is:
A) km
B) m/s
C) kg
D) W
Answer: B) m/s
5. The power in wind is proportional to:
A) Wind speed

- B) Square of wind speed
- C) Cube of wind speed
- D) Wind direction

Answer: C) Cube of wind speed

6. The instrument used to measure wind speed is:

- A) Barometer
- B) Thermometer
- C) Anemometer
- D) Hygrometer

Answer: C) Anemometer

7. Wind turbines are generally installed in:

- A) Low wind areas
- B) High wind areas
- C) Underground
- D) Forests only

Answer: B) High wind areas

8. The blades of a wind turbine are used to:

- A) Store energy
- B) Convert wind energy into rotational energy
- C) Measure wind
- D) Produce heat

Answer: B) Convert wind energy into rotational energy

9. Wind energy is considered clean because it:

- A) Produces smoke
- B) Produces no pollution
- C) Uses fuel
- D) Is costly

Answer: B) Produces no pollution

10. A group of wind turbines is called a:

- A) Wind station
- B) Wind plant
- C) Wind farm
- D) Wind system

Answer: C) Wind farm