

UNIT-II SOLAR RADIATION**FILL IN THE BLANKS**

1. Solar radiation is energy emitted by the _____.
Answer: Sun
2. Solar radiation travels in the form of _____ waves.
Answer: Electromagnetic
3. The radiation received directly from the Sun is called _____ radiation.
Answer: Direct (Beam)
4. Radiation scattered by the atmosphere is known as _____ radiation.
Answer: Diffuse
5. The reflected part of solar radiation is called _____.
Answer: Albedo
6. The unit of solar radiation is _____.
Answer: W/m²
7. The instrument used to measure solar radiation is _____.
Answer: Pyranometer
8. The solar constant is approximately _____ W/m².
Answer: 1367
9. Infrared radiation mainly produces _____.
Answer: Heat
10. The angle at which sunlight strikes a surface is called the _____ angle.
Answer: Angle of incidence

Multiple Choice Questions (MCQs)

1. Solar radiation reaches Earth through:
A) Conduction
B) Convection
C) Radiation
D) Reflection
Answer: C) Radiation
2. Which type of solar radiation is scattered in the atmosphere?
A) Direct
B) Diffuse
C) Reflected
D) Beam
Answer: B) Diffuse
3. The solar constant is:
A) 500 W/m²
B) 1000 W/m²
C) 1367 W/m²
D) 2000 W/m²
Answer: C) 1367 W/m²
4. The device used to measure solar radiation is:
A) Thermometer
B) Barometer
C) Pyranometer
D) Hygrometer
Answer: C) Pyranometer

5. Infrared radiation is mainly responsible for:
- A) Light
 - B) Heat
 - C) Sound
 - D) Pressure
- Answer: B) Heat**
6. Which radiation comes directly from the Sun without scattering?
- A) Diffuse
 - B) Reflected
 - C) Direct
 - D) Infrared
- Answer: C) Direct**
7. The reflected solar radiation from Earth's surface is called:
- A) Diffuse radiation
 - B) Beam radiation
 - C) Albedo
 - D) Spectrum
- Answer: C) Albedo**
8. Maximum solar radiation is received at:
- A) Morning
 - B) Noon
 - C) Evening
 - D) Midnight
- Answer: B) Noon**
9. Solar radiation includes:
- A) Only visible light
 - B) Only infrared
 - C) Only ultraviolet
 - D) UV, visible, and infrared
- Answer: D) UV, visible, and infrared**
10. The angle of incidence affects:
- A) Color
 - B) Efficiency of solar collection
 - C) Weight
 - D) Pressure
- Answer: B) Efficiency of solar collection**