

Units and Measurements

Multiple Choice Questions (MCQs) on SI Base Quantities and Units

1. Which of the following is the SI unit of length?

- a) Yard
- b) Metre
- c) Foot
- d) Mile

2. The SI unit of mass is:

- a) Gram
- b) Pound
- c) Kilogram
- d) Tonne

3. What is the SI unit for time?

- a) Minute
- b) Hour
- c) Second
- d) Day

4. The SI base unit for electric current is:

- a) Volt
- b) Ampere
- c) Coulomb
- d) Ohm

5. Which of the following represents the SI unit of thermodynamic temperature?

- a) Degree Celsius
- b) Kelvin
- c) Fahrenheit
- d) Rankine

6. The amount of substance in the SI system is measured in:

- a) Mole
- b) Gram
- c) Kilogram
- d) Litre

7. The SI unit of luminous intensity is:

- a) Lumen
- b) Lux
- c) Candela
- d) Watt

8. The SI unit for plane angle is:

- a) Degree
- b) Radian
- c) Steradian
- d) Grad

9. What is the SI unit for solid angle?

- a) Degree
- b) Radian
- c) Steradian
- d) Grad

10. The unit 'second' in the SI system is defined based on:

- a) The vibrations of a quartz crystal
- b) The rotation of the Earth
- c) The hyperfine transition frequency of cesium-133 atom
- d) The oscillations of a pendulum

11. The kilogram is defined by the fixed numerical value of:

- a) The Planck constant
- b) The Avogadro constant
- c) The speed of light
- d) The Boltzmann constant

12. The SI unit of force is derived from base units. What is it?

- a) Joule
- b) Watt
- c) Newton
- d) Pascal

13. Which of the following quantities is measured in amperes?

- a) Voltage
- b) Electric current
- c) Electric charge
- d) Electrical resistance

14. The unit 'kelvin' is defined by the:

- a) Triple point of water
- b) Speed of light
- c) Planck constant
- d) Boltzmann constant

15. What is the derived SI unit for energy?

- a) Newton
 - b) Joule
 - c) Watt
 - d) Pascal
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Key

- 1. b
- 2. c
- 3. c
- 4. b
- 5. b
- 6. a
- 7. c
- 8. b
- 9. c
- 10. c
- 11. a
- 12. c
- 13. b
- 14. d
- 15. b