

Kerala PSC - Village Field Assistant (VFA)

Physics Practice Set: 30 MCQs with Answer Key

- 1. The SI unit of energy and work is the**
 - (A) Pascal
 - (B) Joule
 - (C) Watt
 - (D) Newton
- 2. The SI unit of power is the**
 - (A) Watt
 - (B) Newton
 - (C) Hertz
 - (D) Joule
- 3. The SI unit of pressure is the**
 - (A) Newton
 - (B) Pascal
 - (C) Ampere
 - (D) Joule
- 4. The SI unit of electrical resistance is the**
 - (A) Coulomb
 - (B) Ohm
 - (C) Volt
 - (D) Ampere
- 5. The SI unit of frequency is the**
 - (A) Watt
 - (B) Hertz
 - (C) Decibel
 - (D) Tesla
- 6. The SI unit of electric charge is the**
 - (A) Volt
 - (B) Farad
 - (C) Ampere
 - (D) Coulomb
- 7. The speed of light in vacuum is approximately**
 - (A) 3×10^8 m/s
 - (B) 3×10^5 m/s
 - (C) 3×10^{10} m/s
 - (D) 3×10^6 m/s
- 8. The speed of sound in air at room temperature is about**
 - (A) 300,000 m/s
 - (B) 34 m/s
 - (C) 3400 m/s
 - (D) 340 m/s
- 9. The acceleration due to gravity on Earth is about**
 - (A) 10.8 m/s squared
 - (B) 98 m/s squared
 - (C) 9.8 m/s squared
 - (D) 6.7 m/s squared

- 10. The weight of a body on the Moon is about what fraction of its weight on Earth?**
(A) $\frac{1}{4}$
(B) $\frac{1}{9}$
(C) $\frac{1}{6}$
(D) $\frac{1}{2}$
- 11. Newton's first law of motion is also called the law of**
(A) Action-reaction
(B) Inertia
(C) Acceleration
(D) Gravitation
- 12. The working of a rocket is based on Newton's**
(A) Law of gravitation
(B) Second law
(C) Third law
(D) First law
- 13. An ammeter is connected in a circuit in**
(A) Neither
(B) Both
(C) Series
(D) Parallel
- 14. A voltmeter is connected in a circuit in**
(A) Parallel
(B) Neither
(C) Series
(D) Both
- 15. Sound cannot travel through**
(A) Steel
(B) Vacuum
(C) Air
(D) Water
- 16. The minimum distance from a reflecting surface needed to hear a distinct echo is about**
(A) 7 m
(B) 17 m
(C) 34 m
(D) 50 m
- 17. According to the laws of reflection, the angle of incidence is**
(A) Equal to reflection angle
(B) Always 90 degrees
(C) Double reflection angle
(D) Half reflection angle
- 18. Rear-view mirrors in vehicles are**
(A) Cylindrical mirrors
(B) Concave mirrors
(C) Convex mirrors
(D) Plane mirrors

- 19. The formation of a rainbow is due to**
(A) Interference
(B) Dispersion of light
(C) Polarisation
(D) Diffraction of light
- 20. Optical fibres work on the principle of**
(A) Dispersion
(B) Refraction only
(C) Diffraction
(D) Total internal reflection
- 21. Myopia (short-sightedness) is corrected using a**
(A) Convex lens
(B) Bifocal lens only
(C) Concave lens
(D) Cylindrical lens
- 22. X-rays were discovered by**
(A) Becquerel
(B) Roentgen
(C) Rutherford
(D) Marie Curie
- 23. The filament of an electric bulb is made of**
(A) Nichrome
(B) Copper
(C) Aluminium
(D) Tungsten
- 24. A fuse wire is connected to the circuit in**
(A) Both
(B) Series
(C) Neither
(D) Parallel
- 25. A transformer works on**
(A) Both AC and DC
(B) Alternating current only
(C) Direct current only
(D) Neither
- 26. Heat transfer that does not need a material medium is**
(A) Evaporation
(B) Convection
(C) Radiation
(D) Conduction
- 27. The Celsius and Fahrenheit scales give the same reading at**
(A) 0 degrees
(B) -40 degrees
(C) 100 degrees
(D) 32 degrees
- 28. Absolute zero is approximately**
(A) -100 degrees C
(B) -273 degrees C
(C) -373 degrees C
(D) 0 degrees C

29. The principle explaining why ships float is

- (A) Bernoulli's principle
- (B) Pascal's law
- (C) Boyle's law
- (D) Archimedes' principle

30. The Sun's energy is produced by

- (A) Nuclear fission
- (B) Nuclear fusion
- (C) Chemical burning
- (D) Radioactive decay

Answer Key

Q	Ans	Q	Ans	Q	Ans
1	(B) Joule	11	(B) Inertia	21	(C) Concave lens
2	(A) Watt	12	(C) Third law	22	(B) Roentgen
3	(B) Pascal	13	(C) Series	23	(D) Tungsten
4	(B) Ohm	14	(A) Parallel	24	(B) Series
5	(B) Hertz	15	(B) Vacuum	25	(B) Alternating current only
6	(D) Coulomb	16	(B) 17 m	26	(C) Radiation
7	(A) 3×10^8 m/s	17	(A) Equal to reflection angle	27	(B) -40 degrees
8	(D) 340 m/s	18	(C) Convex mirrors	28	(B) -273 degrees C
9	(C) 9.8 m/s squared	19	(B) Dispersion of light	29	(D) Archimedes' principle
10	(C) 1/6	20	(D) Total internal reflection	30	(B) Nuclear fusion