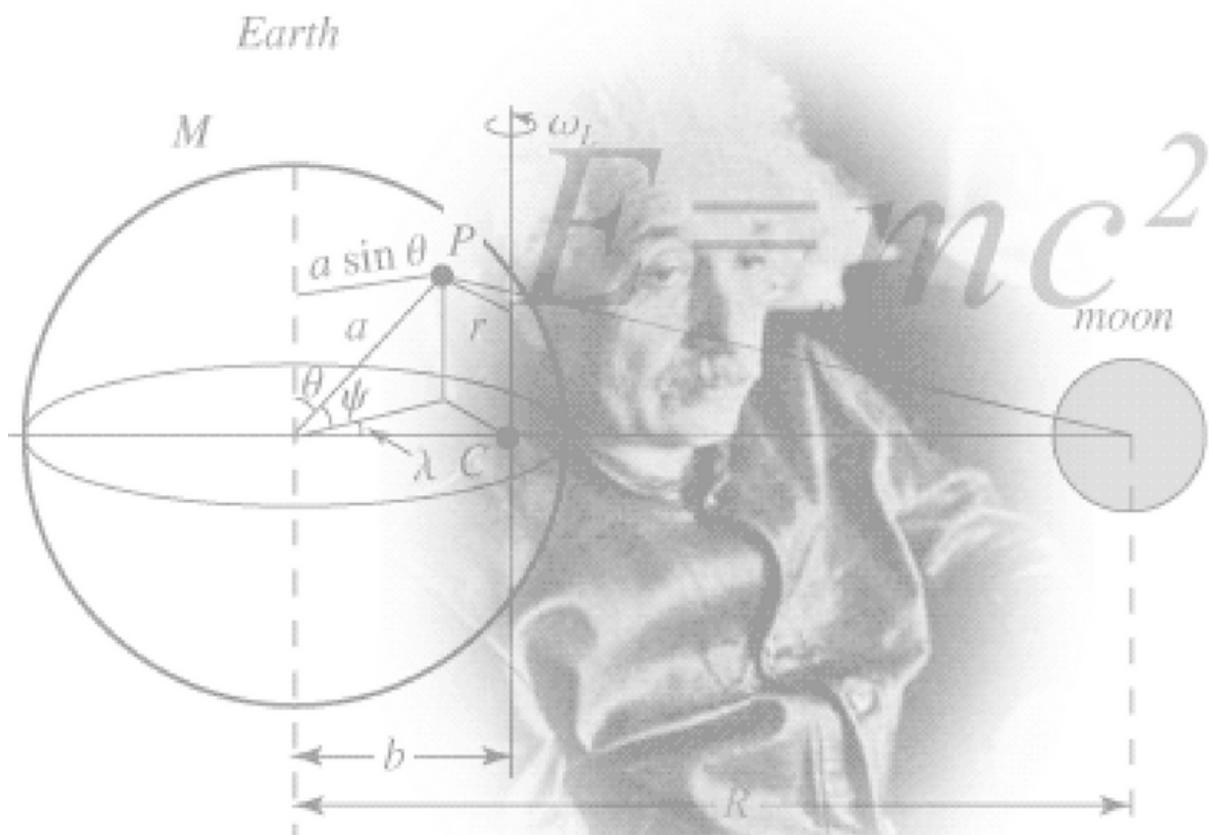


# PHYSICS

## MCQ



**Physics MCQ:**

Q1. A diode can be used for-

- (a) Amplification
- (b) Modulation
- (c) Detection
- (d) Rectification

Ans: d

Q2. Which of the following statement is/are correct for Antenna?

- (a) It converts electric power into radio waves
- (b) It is a transducer
- (c) It converts radio waves into electric power
- (d) All of the above

Ans: d

Q3. A diode as a rectifier converts-

- (a) AC(alternate current) to DC(direct current)
- (b) DC(direct current) to AC(alternate current)
- (c) Varying dc into constant dc
- (d) High voltage into low voltage and vice-versa

Ans: a

Q4. In a transistor, the base is-

- (a) An insulator
- (b) A conductor of low resistance
- (c) A conductor of high resistance
- (d) An extrinsic semiconductor

Ans: d

Q5. In a transistor-

- (a) Both the emitter and the collector are equally doped
- (b) Emitter is more heavily doped than the collector
- (c) The base is made very thin and is lightly doped
- (d) (b) and (c)

Ans: d

Q6. Radio waves of constant amplitude can be generated with—

- (a) Rectifier
- (b) Filter
- (c) Oscillator
- (d) FET

Ans: c

Q7. In the use of transistor as an amplifier-

- (a) The emitter-base junction is forward biased and the collector-base junction is reverse biased

- (b) Both the junctions are forward biased
- (c) Any of the two junctions may be forward biased
- (d) None of these

Ans: a

Q8. Which of the following is not transducer?

- (a) Loudspeaker
- (b) Antenna
- (c) Microphone
- (d) All of these

Ans: d

Q9. In black and white televisions, pictures on the screen are produced due to bombardment of:

- (a) X-ray photons on a white screen
- (b) X-ray photons on a white fluorescent screen
- (c) Electrons on a white screen
- (d) Electrons on a fluorescent white screen

Ans: d

Q10. What is the difference between Bluetooth and Wi-Fi devices?

- (a) Bluetooth used 2.4 GHz radio frequency band whereas Wi-Fi can use 2.4 GHz or 5 GHz frequency band
- (b) Maximum range for Bluetooth based wireless connections is 30m while for Wi-Fi, it can extend well upto 100m.
- (c) Connecting two devices over Bluetooth is fairly simple as there is just a simple key matching process. On the other hand, connections concerning Wi-Fi need an expertise in configuration and security pass code matching process.
- (d) All of the above

Ans: d

Q11. The wavelength of visible light are between

- (a)  $0.4 \mu\text{m}$  to  $0.7 \mu\text{m}$
- (b)  $3000 \mu\text{m}$  to  $0.4 \mu\text{m}$
- (c)  $0.7 \mu\text{m}$  to  $1000 \mu\text{m}$
- (d)  $0.1 \text{cm}$  to  $30 \text{cm}$

Ans: a

Q12. The laws of reflection are for

- (a) Concave mirror
- (b) Convex mirror
- (c) Plane mirror
- (d) All reflecting surfaces

Ans: d

Q13. In vacuum the speed of light depends upon

- (a) Wavelength

- (b) Velocity of the source of light
- (c) Frequency
- (d) None of these

Ans: d

Q14. A plane mirror reflects a beam of light to form a real image. The incident beam is

- (a) Divergent
- (b) Convergent
- (c) Parallel
- (d) None of these

Ans: b

Q15. The amount of light reflected depends upon the

- (a) Nature of the surface
- (b) Smoothness of the surface
- (c) Nature of material of object
- (d) All of the above

Ans: d

Q16. Total internal reflection can occur when light passes from

- (a) Denser to rarer medium
- (b) Rarer to denser medium
- (c) One medium to another of equal refractive index
- (d) None of these

Ans: a

Q17. The refractive index of a given piece of transparent quartz is greatest for

- (a) Violet light
- (b) Yellow light
- (c) Green light
- (d) Blue light

Ans: a

Q18. A well cut diamond appears bright because of

- (a) Dispersion
- (b) Total internal reflection
- (c) It emits light
- (d) Radioactive

Ans: b

Q19. When a ray of light enters a glass slab from air

- (a) Its wavelength increases
- (b) Its wavelength decreases
- (c) Its frequency increases
- (d) Both increase

Ans: b

Q20. An object is placed between two parallel mirrors. The number of images formed is

- (a) 6
- (b) 8
- (c) 9
- (d) Infinity

Ans: d

Q21. What type of lens is a magnifying glass?

- A Concave
- B Plano-Concave
- C Plane Glass
- D Convex

Ans: D

Q22. The presence of charge on a substance can be confirmed by a

- A Gold Leaf Electroscope
- B Electrodes
- C Ammeter
- D Thermometer

Ans: A.

Q23. Conductors have a \_\_\_\_\_ resistance.

- A High
- B Low
- C Intermediate
- D Unknown

Ans: B

Q24. Light travels in a

- A Circular Path
- B Parabolic Path
- C Hyperbolic Path
- D Straight Line

Ans: D

Q25. The absorption of ink by blotting paper involves

- A. viscosity of ink
- B. capillary action phenomenon
- C. diffusion of ink through the blotting
- D. siphon action

Ans: B

Q26. Stars appears to move from east to west because

- A. all stars move from east to west
- B. the earth rotates from west to east
- C. the earth rotates from east to west
- D. the background of the stars moves from west to east

Ans: B

Q27. Moment of inertia determines?

- A.vector
- B.scalar
- C.phasor
- D. torque

Ans: D

Q28. Radioactivity was discovered by

- A.Marie Curie
- B.Ernest Rutherford
- C.Henri Becquerel
- D.Enrico Fermi

Ans: C

Q29. Light travels at the fastest speed in

- A.glass
- B.water
- C.hydrogen
- D.vacuum

Ans: D

Q30. Radiocarbon dating technique is used to estimate the age of

- A.rocks
- B.monuments
- C.soil
- D.fossils

Ans: D