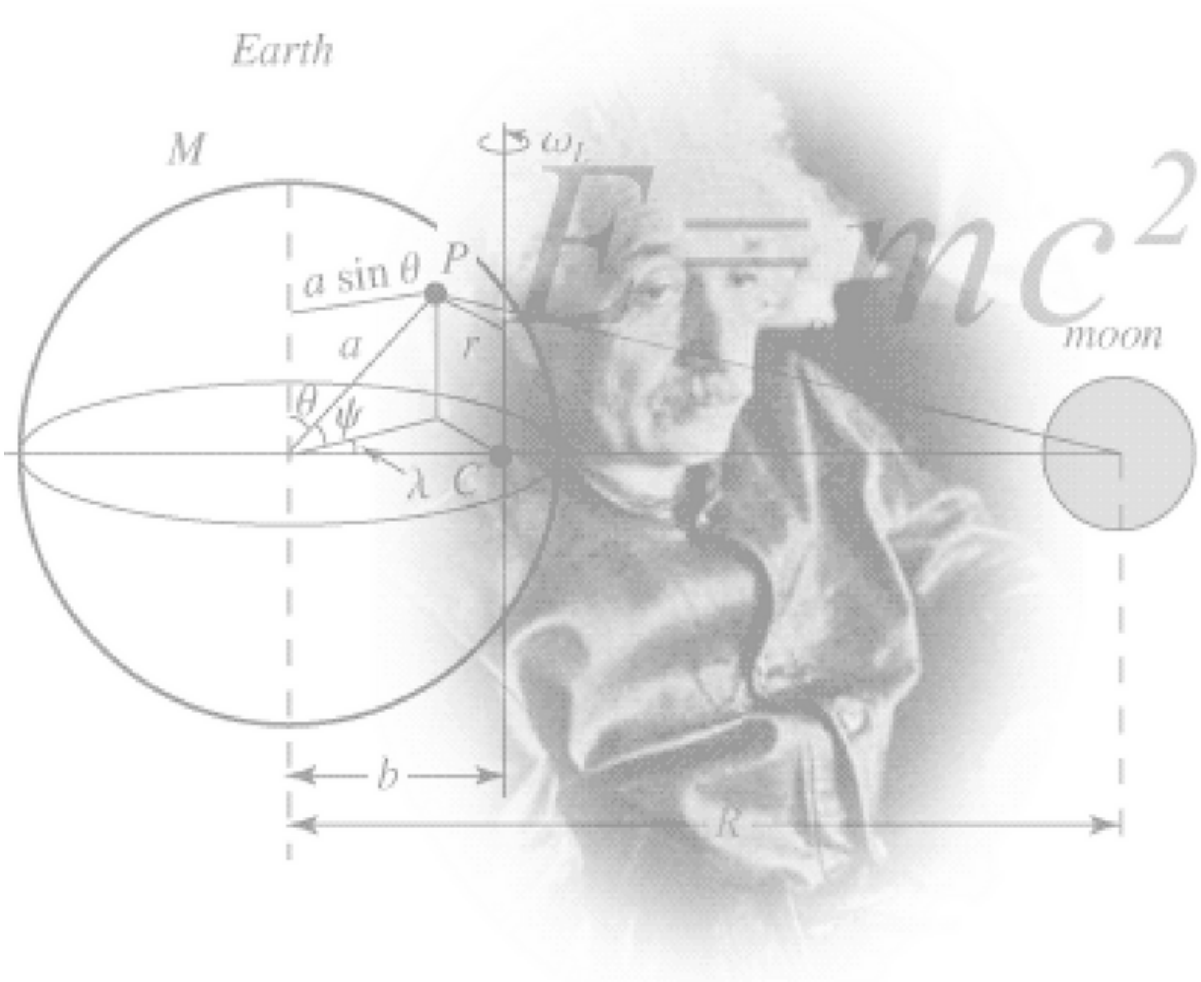
BANK NAUKRI

PHYSICS

MCQ



Physics Q&A – 2nd August 2017:

Q1. The actual flow of electrons which constitute the current is from:
(a) Negative to positive terminal
(b) Positive to negative terminal
(c) Flow at random
(d) None of the above
Ans: a

Q2. What is the effect of changing the wire in a circuit from a straight thick wire to a longer (coiled) thick wire?
(a) The bulbs become dimmer
(b) The bulbs become brighter
(c) The bulbs stay at the same level of brightness
(d) none of the above
Ans: c

Q3. Match the following with correct response.

List-I	List-II
(1) Best conductor	(A) Silicon
(2) Standard resistor	(B) Silver
(3) Semi- conductor	(C) Ebonite
(4) Insulator	(D) Constantan

(a) 1-C, 2-B, 3-D, 4-A
(b) 1-A, 2-C, 3-B, 4-D
(c) 1-B, 2-D, 3-A, 4-C
(d) 1-D, 2-A, 3-C, 4-B
Ans: c

Q4. Statement A : Resistivity increases with decrease in temperature in insulators. ,
Statement B : Resistivity of a conductor increases with increasing temp.
(a) Neither statement A nor statement B is true
(b) Both the statements A and B are true
(c) Statement A is true, B is false
(d) statement A is false, B is true
Ans: d

Q5. Maganin is an alloy of—
A. Copper
B. Manganese
C. Nickel
D. Platinum
(a) A and C
(b) A and B
(c) All of these
(d) A, B and C

Ans: d

Q6. Nichrome and copper wires of the same length and same radius are connected in series. Current I is passed through them. Which of the two get heated first?
(a) copper wire
(b) Nichrome wire
(c) None of these
(d) Both
Ans: b

Q7. What is the SI unit of electrical conductance?
(a) Volt
(b) Watt
(c) Siemens
(d) Ampere
Ans: c

Q8. Match the following with correct response.

List-I	List-II
(1) Bulb filament	(A) Nichrome
(2) Heating element of an electric iron	(B) Potential difference
(3) Super conductors	(C) Zero resistivity
(4) EMF is a	(D) Tungsten

(a) 1-A, 2-C, 3-B, 4-D
(b) 1-B, 2-D, 3-A, 4-C
(c) 1-D, 2-A, 3-C, 4-B
(d) 1-C, 2-B, 3-D, 4-A
Ans: c

Q9. What should be present in a substance to make it a conductor of electricity?
(a) Strongly held electrons
(b) Free electrons
(c) Strongly held protons
(d) Free protons
Ans: b

Q10. Which of the following is a conductor of electricity?
(a) Silver
(b) Copper
(c) Aluminium
(d) All of the above
Ans: d

Q11. When a steady current flows through a conductor, the electrons in it move with certain average speed as—
(a) Accelerated speed
(b) root mean square speed

(c) drift speed
(d) average velocity
Ans: c

Q12. Which of the following is incorrect about the heat produced in a resistor?
(a) It is directly proportional to the square of the current
(b) directly proportional to resistance for a given current
(c) directly proportional to the time for which the current flows through the resistors
(d) None of these
Ans: d

Q13. What is the direction of electric current in an electric circuit?
(a) from positive to positive
(b) from negative to positive terminal
(c) from positive to negative
(d) from negative to negative
Ans: c

Q14. Why is tungsten used exclusively for the filament of an incandescent lamp?
(a) Tungsten can be drawn into thin wires which in turn offer high resistance
(b) Tungsten has a fairly good resistivity
(c) The melting point of tungsten is very high
(d) All of these
Ans: d

Q15. Which of the following material is used for electric wire heater?
(a) Silver
(b) lead
(c) Nichrome
(d) Copper
Ans: c

Q16. Why ammeter is likely to burn out if you connect it in parallel?
(a) It has high voltage
(b) It has high resistance
(c) It has low resistance
(d) It has low voltage
Ans: c

Q17. Statement A : light from bathroom bulb gets dimmer for a moment, when geyser is switched on ,
Statement B : Insulators conduct charges, they can be charged easily by friction.
(a) Both the statement A and B are true
(b) statement B is true, A is false
(c) Neither statement A nor statement B is true.
(d) statement A is true, B is false
Ans: d

Q18. What will happen to current passing though a resistor if the potential difference across its ends is doubled and the resistance is halved?
(a) Becomes four times
(b) Becomes halved
(c) Remain unchanged
(d) Becomes one fourth
Ans: a

Q19. Match the following with correct response.
(1) Electric current
(2) Resistance
(3) Potential difference
(4) Resistivity
(A) Ampere
(B) Volt
(C) Ohm
(D) Ohm-m
(a) 1-A, 2-C, 3-B, 4-D
(b) 1-B, 2-D, 3-A, 4-C
(c) 1-D, 2-A, 3-C, 4-B
(d) 1-C, 2-B, 3-D, 4-A
Ans: a

Q20. Ohms law is not obeyed by—
(a) Both electrolytes and semiconductor diodes
(b) alloys
(c) semiconductor diodes
(d) electrolytes
Ans: a

Q21. If the angle of incidence, θi = 0°, the angle of reflection, θr = _____.
A. 0°
B. 90°
C. 180°
D. 45°
Ans: a

Q22. Total internal reflection will occur if the angle of reflection is...
A. 45°
B. 60°
C. 90°
D. 99°
Ans: d

Q23. The refractive index of a rarer medium with respect to a denser medium is...
A. 1

B. greater than 1
C. smaller than 1
D. negative
Ans: c

Q24. The refractive index of a denser medium with respect to a rarer medium is...
A. 1
B. greater than 1
C. smaller than 1
D. negative
Ans: b

Q25. The image formed by a plane mirror is _____.
A. real
B. diminished
C. enlarged
D. laterally inverted
Ans: d

Q26. Absolute refractive index of any medium is always _____.
A. 1
B. > 1
C. < 1
D. 0
Ans: b

Q27. Which of the following has the highest refractive index?
A. Glass
B. Water
C. Pearl
D. Diamond
Ans: d

Q28. No matter how far is the object from the mirror, the image of the object appears erect. The mirror is _____.
A. concave
B. convex
C. either concave or convex
D. none of these
Ans: b

Q29. For a plane mirror, magnification (m)=_____
A. 0
B. 1
C. ± 1
D. ≤ 0
Ans: b

Q30. We can see objects because of which phenomena?
A. reflection
B. refraction
C. transmission
D. diffraction
Ans: a