NEET Predicted Question Paper 2024 Physics

- In a series LCR circuit, the inductance L is 10 mH, capacitance C is 1 qF and resistance fi is 100 D. The frequency at which resonance occurs is :

(1) 1.59 kHz   (2) 15.9 rad/s
(3) 15.9 kHz   (4) 1.59 rad/s

- A football player is moving southward and suddenly turns eastward with the same speed to avoid an opponent. The force that acts on the player while turning is :

(1) along south-west
(2) along eastward
(3) along northward
(4) along north-east

- The ratio of radius of gyration of a solid sphere of mass M and radius fi about its own axis to the radius of gyration of the thin hollow sphere of same mass and radius about its axis is?

- The ratio of frequencies of fundamental 23 harmonic produced by an open pipe to that of closed pipe having the same length is

(1) 3 : 1   (2) 1 : 2
(3) 2 : 1   (4) 1 : 3

An ac source is connected to a capacitor C. Due to decrease in its operating frequency :
(1) capacitive reactance remains constant
(2) capacitive reactance decreases.
(3) displacement current increases.
(4) displacement current decreases.

- Resistance of a carbon resistor determined from colour codes is (22000 + 5%) CL The colour of third band must be :

- The net magnetic surface is?

- In the hydrogen spectrum, the shortest wavelength in the Balmer series is . The shortest wavelength in the Bracket series is?

- Calculate the maximum acceleration of a moving car so that a body lying on the floor of the car remains stationary. The coefficient of static friction between the body and the floor is 0.15 (g = 10 m s 2).

- 10 resistors, each of resistance fi are connected in series to a battery of emf €
  and negligible internal resistance. Then those are connected in parallel to the
  same battery, the current is increased o times. The value of n is :

- The resistance of platinum wire at 0°C is 2D and 6.8D at 80°C. The temperature
  coefficient of resistance of the wire is?

- A bullet from a gun is fired on a rectangular wooden block with velocity u. When
  a bullet travels 24 cm through the block along its length horizontally, velocity of
  the bullet becomes . Then it further penetrates into the block in the same
  direction before coming to rest exactly at the other end of the block. The total
  length of the block is :