31. Coil of a galvanometer is suspended in a radial magnetic field so that the deflecting torque on the coil is always

A. BINA cosa
B. BINA sina
C. BINA tana
D. BINA

Answer: Option D

32. A galvanometer basically is an instrument used to

A. detect current in a circuit
B. measure current flowing through a circuit
C. measure voltage across a circuit
D. measure potential difference between two points in a circuit

Answer: Option A

33. The effective way to increase the sensitivity of a moving coil galvanometer is to

A. use a very long and fine suspension
B. use a coil of very large area
C. use a coil with very large number of turns
D. use a very strong magnetic field

Answer: Option D

34. A wheat stone bridge is said to be balanced when

A. maximum current flows through the galvanometer branch
B. minimum current flows through the galvanometer branch
C. potential difference across galvanometer branch is maximum
D. potential difference across galvanometer branch is zero

Answer: Option D

35. When an electron moving with a uniform speed in a vacuum enters a magnetic field in a direction perpendicular to the field the subsequent path of the electron is

A. a straight line parallel to the field
B. a parabola in a plane perpendicular to the field
C. a circle in a plane perpendicular to the field
D. a straight line along its initial direction

Answer: Option C

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36. A particle of mass m charge q and speed V enters a uniform magnetic radius r. The radius r of the circle is

A. independent mass m
B. directly proportional to m
C. directly proportional to q
D. directly proportional to B

Answer: Option B

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37. Galvanometer is a very sensitive device with

A. very low damping
B. very high damping
C. no damping at all
D. radial field disintegration

Answer: Option A

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38. Which one of the following methods would be able to increase the sensitivity of a moving coil galvanometer ?

A. connect a shunt across the coil
B. use a coil of smaller cross sectional area
C. use a coil having less number of turns
D. use spiral springs whose force constant is small

Answer: Option D

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39. Heating a magnet will

A. weaken it
B. strengthen it
C. reverse its polarity
D. demagnetize it completely

Answer: Option A

40. If a current carrying solenoid is suspended freely it will

A. be rotating

B. come to rest in N-S direction

C. vibrating like galvanometer needle

D. comes to rest after rotation

Answer: Option B