Physics FSC Part 2 Chapter 14 Online MCQ's Test

Sr	Questions	Answers Choice
1	The name of the scientist who noted that a compass needle was deflected when placed near the current carrying conductor	A. Henry B. Faraday C. Coloumb D. Oersted
2	Weber is the unit of	A. Magnetic flux B. Permeability C. magnetic force D. None of above
3	The dimensions of magnetic flux are	A. M¹L⁻²T¹A¹ B. MLT⁻²A⁻¹ C. ML²T²A⁻¹ D. ML²T⁻²A⁻¹
4	The unit of magnetic induction B is	A. Coulomb B. Ampere C. Coulomb/ampere D. Weber/m²
5	The magnetic field is uniform and stronger	A. Outside the solenoid B. Inside the solenoid C. At the central part of the solenoid D. None of these
6	The permeability of free space is measured in	A. wb A/m B. Am/wb C. wb/Am D. m/wbA
7	If an electron is prijected in a magnetic field with velocity V, it will experience a force	
8	Lorentz force means the force acting on a particle, which is	A. Magnetic force only B. Electric force only C. Sum of electric and magnetic force D. None of these
9	Question Image	D. None of the above
10	CRO works by deflecting the beam of electron as they pass through	A. Uniform magnetic field B. Uniform electric field between two sets of parallel plates C. Non-uniform magnetic field D. None of these
11	In CRO, the output waveform of time base generator is	A. Circular B. Square C. Sinusoidal D. Saw-toothed
12	For accurate measurement of current through a circuit, the resistance of ammeter should be	A. Very small B. Very high C. Neither small nor high D. None of the above
13	To convert a galvanometer into an ammeter, we connect with it a	A. Shunt resistance B. Low value parallel C. Low value by pass resistor D. All of above
14	The acceleration of an electron of mass m and charge e, moving with uniform speed v at right angles to a magnetic field of flux density B, is given by	D. Bevm
15	The unit of magnetic induction is:	A. Tesla B. Weber C. Weber metre D. NAm⁻¹
16	1 tesla =	A. 1 MAm⁻¹ B. 1NA⁻¹m C. 1NA⁻¹m⁻¹

		D. None of above
17	The conductor experience force, placed in magnetic above:	A. Move towards weaker part of field B. Move towards stronger part of field C. Remains at rest D. Move upwards in space
18	The unit of Magnetic flux is called.	A. weber B. weber/m² C. NM⁻¹A⁻¹ D. None of above
19	μ◦ (Ampere's constant) has value.	A. 4πx10⁻⁷ WbA⁻¹m⁻¹ B. 4πx10⁻¹⁷ Wbm² C. 4πx10⁷ WbA⁻¹m⁻¹ D. 4πx10-27 Wb/m²
20	The field is strong and uniform.	A. Inside the solenoid B. Surrounding of solenoid externally C. Perpendicular to solenoid D. All of above
21	The magnetic field inside solenoid is given:	A. μ_◦nI² B. μ_◦nI C. μ_◦n/1² D. μ_◦I/n
22	The vector sum of electric force and magnetic force is called:	A. Deflecting force B. Lorentz force C. Newton force D. Faraday's force
23	e/m=	A. v/Br B. Br/V C. VB/r D. Vr/B
24	The anodes in cathode ray oscilloscope.	A. Control number of waves B. Control brightness of sept formed C. Accelerate as well as focus beam D. Negative potential w.r.t to chithode
25	The sensitivity of Galvanometer can be increased by:	A. Increasing C/BAN factor B. Decreasing C/BAN factor C. Increasing angle θ D. All of above
26	An ammeter is an electrical instrument which is used to measure.	A. Voltage B. Current C. Resistance D. None
27	The Grid 'G' in cathode ray oscilloscope.	A. Accelerate as well as focus electron beam B. Control no. of electrons beam C. Is at - Ve potential with respect to cathode. D. Both d and b
28	Torque on a current carrying coil	A. τ=IBA cos B. τ = ILB sinα C. τ = IBA sinα D. τ = ILBcosα
29	A galvanometer is an electrical instrument used to	A. Measure resistance B. Measure voltage C. Detect passage of current D. None of these
30	A soft iron cylinder is placed inside coil galvanometer to:	A. Make field circular and strong B. Make field radial and weak C. Make field radial and strong D. All of above
31	NIBA =	A. cθ B. θ/c C. c²θ D. c²/θ
32	A moving charge is surrounded by:	A. 2 Fields B. 3 Fields C. 4 Fields D. None of these

33	A photon while passing thorugh a magnetic field are deflected towards:	A. North pole B. South pole C. Are ionized D. None of these
34	Magnetism is related to:	A. Stationary charges B. Moving charges C. Stationary & Movingcharges D. Law of motion
35	When charge particle enter perpendicular to magnetic field, the path followed by it is:	A. A helix B. A circle C. Straight line D. Ellipes
36	The torque in the coil can be increased by increasing:	A. No. of turns B. Current and magnetic field C. Area of coil D. All of the above
37	The magnetic flux will be max, For an angle of:	A. 0° B. 60° C. 90° D. 180°
38	The Weber is unit of measure of:	A. Conductance B. Electric current C. Magnitic flux D. Electric flux
39	One weber is equal to:	A. N.A ²/m B. N.m²/A C. N.A/m D. N.m/A
40	An electron moves at 2 x 10^2 m/sec perpendicular to magnetic field of 2T what is the magnitude of magnetic force:	A. 1 x 10⁻⁶ N B. 6.4 x 10⁻¹⁷ N C. 3.6 x 10⁻²⁴ N D. 4 x 10⁶ N
41	The force on a charge particle moving parallel to magnetic field is:	A. Maximum B. Minimum C. Zero D. None of these
42	Ampere's law is applicable to:	A. Circular path B. Rectangular path C. To any closed path D. Nonwe of these
43	The unit of permiability of free space is:	A. T.m/A B. T.m²/A C. T.m/A² D. None of these
44	A Current flowing towards the reader is denoted by.	A. Cross B. a bracket C. A dot D. Positive sign
45	The SI unit of E is NC-1 and that of B is Na-1 m-1 then the unit of E/B is.	A. ms-2 B. ms C. ms⁻¹ D. m-1s-1
46	Write the SI unit of magnetic flux.	A. Tesla B. Weber C. Weber m-2 D. Tesla m2
47	Two parallel wires carrying currents in the opposite direction.	A. Repel each other B. Attract each other C. Have no effect upon each other D. They cancel out their individual magnetic fields.
48	A dot represents the direction of magnetic field.	A. Out of page B. Into the page C. Tangent to page D. Parallels to page

49	___ is correct relation.	A. IT = 10⁻⁴G B. IT = 10⁴ G C. IT = 10² G D. IT = 10⁻² G
50	The SI Unit of magnetic induction is.	A. Weber B. Tesla C. Gauss D. Newton
51	The magnetic force is simply a	A. Reflecting force B. Deflecting force C. Restoring force D. Gravitational force
52	A charged particle enters in a strong magnetic field its K.E.	A. Remain constant B. Increases C. Decreases D. Increases then decreases
53	Magnetic lines of force are.	A. Imaginary B. Real C. Perpendicular D. In phase with electric lines of force
54	A current carrying conductor experience maximum magnetic force in a uniform magnetic field when it is placed.	A. Perpendicular to field B. Parallel to field C. At an angle of 60 ^o to the field D. None of these
55	A positive charge is moving towards an observer, The direction of magnetic induction will be.	A. Toward right B. Anti clockwise C. Clockwise D. Toward left
56	The SI unit of magnetic induction 'B' Tesla is equal to.	A. NA-1m-1 B. Nam-1 C. NA-1 m D. Na2m-1
57	The SI unit of magnetic permeability is.	A. WbA-1m-1 B. Wbm-2 C. WbmA-1 D. WbAm-1
58	Magnetic flux density is measured in	A. Weber B. Weber/m2 C. Tesla -m D. Gauss
59	The SI unit of magnetic induction Tesla is equal to	A. N-1 Am B. NA m2 C. NA-1n2 D. NA-1m-1
60	Magnetic induction can be measured in units of.	A. Tesla B. Gauss C. Weber/m2 D. All of the above
61	The SI unit of flux density is.	A. NA-1 m2 B. NA-1 m-1 C. NAm-1 D. NA-1 m
62	If the length and number of turns of a solenoid are doubled strength of magnetic field with.	A. Be doubled B. Become half C. Not change D. Be four time
63	If the number of turns become double but length remain same, then magnetic field in the solenoid become.	A. Half B. Double C. Remain same D. Zero
64	Energy stored per uint volume inside a solenoid is called as	A. energy density B. Electric flux C. Work D. Volume charge density
65	Magnetic flux density at a point due to current carrying coil is determined by	A. Ampere's law B. Faraday's law C. Lenz's law D. Gauss's law
66	In current carrying long solenoid the magnetic field produced does not depend upon.	A. The radius of solenoid B. Number of turns per unit length C. Current flowing through solenoid

		C. Current flowing through solenoid D. All of the above
67	If the length of solenoid is doubled but N same, B inside the solenoid becomes.	A. Half B. Doubled C. One fourth D. Four times
68	For a current carrying solenoid the term 'n' has unit as.	A. No unit B. m⁻¹ C. m⁻² D. m-3
69	If current flowing through a solenoid becomes four times, then magnetic field inside becomes.	A. two times B. three times C. four times D. Half
70	Force on a charged particle is zero when projected at angle with magnetic field.	A. 0 ^o B. 90^o C. 180^o D. 270^o
71	In current carrying long solenoid the magnetic field produced does note depend upon	A. The radius of solenoid B. Number of turns per unit length C. Current flowing through solenoid D. All of above
72	If a charge is at rest in a magnetic field then force on charge is	A. Zero B. Double C. One fourth D. Four times
73	A charged particle having charge 'q' is moving at right angle to magnetic field. The quantity which varies is.	A. Speed B. Kinetic energy C. Path of motion D. angular velocity
74	The sum of electric and magnetic force is called.	A. Maxwell force B. Lorentz force C. Newton's force D. Centripetal force
75	When a charge is projected perpendicular to a uniform magnetic field, tis path is	A. Spiral B. Helix C. Ellipse D. Circular
76	The e/m of a neutron is	A. Less than electron B. The same as electron C. Zero D. Greater than election
77	An electron enters the magnetic field at right angle from left, B is into paper. The electron will be deflected.	A. upward B. To ward right C. Down ward D. Toward left
78	The value of e/m is smallest for	A. Proton B. Electron C. Beta particle D. Positron
79	Grid in cathode ray oscilloscope controls.	A. Number of electron B. Temperature of filament C. Frequency of electron D. Energy of electrons
80	Brightness of screen of CRO controlled by	A. Grid B. Filament C. Anode D. Cathode
81	The brightness of the spot of CRO screen is controlled by.	A. Anode B. Cathode C. Grid D. Deflecting plates
82	Cathode ray oscilloscope works by deflecting a beams	A. Neutrons B. Protons C. Electrons D. Positron
83	The function of three anodes a C.R.O is	A. To accelerate electrons only B. To focus the electrons only C. To control the brightness of spot on screen D. To accelerate and focus the electrons

84	Torque is produced in a current carrying coil when it is placed in a	A. Magnetic field B. Electric field C. Gravitational field D. Nuclear field
85	Sensitivity of a galvanometer can be increased by	A. Decreasing the value of torsional couple B. Decreasing number of turns C. Decreasing area of plane of coil D. Decreasing magnetic field
86	The sensitivity of galvanometer directly depends upon	A. Magnetic field B. Area of coil C. Both a and b D. None of a, b, c
87	In order to increase sensitivity of galvanometer the value of C may be	A. Increase B. Decrease C. Neither increase nor decrease D. Remain same
88	The effective way to increase the sensitivity of moving coil galvanometer is.	A. Increase the area of coil B. Increase the number of turn C. Increase the magnetic field D. Increase the value of constant C
89	The sensitivity of galvanometer is given by	A. CAN/B B. C/BAN C. BAN/C D. BN/CA
90	In order to measure potential difference voltmeter is always connected in.	A. Series B. Parallel C. Both a and b D. Neither in series nor in parallel
91	When Ohm meter gives full scale deflection it indicates.	A. Zero resistance B. Infinite resistance C. Small resistance D. Very High resistance
92	Galvanometer is sensitive when C/BAN is	A. zero B. Large C. small D. Negative
93	A sensitive galvanometer is	A. Unstable B. Stable C. Moderate D. Both B and C
94	A battery is used in	A. ohmmeter B. Ammeter C. Galvanometer D. Voltemeter
95	Current passing through the coil of galvanometer	A. CO/BAN B. CoN /BA C. NAB/CO D. AN/BCO
96	A device used for detection of current is called.	A. Inductor B. Voltmeter C. Capacitor D. Galvanometer
97	The galvanometer can be made sensitive by making the factor BAN/C	A. Large B. Small C. Constant D. Zero
98	If a low resistance is connected parallel to a galvanometer then galvanometer is converted.	A. Ammeter B. Voltammeter C. Ohmmeter D. Multimeter
99	To convert a galvanometer into a volt meter a high resistance is connected.	A. In series B. In parallel C. In perpendicular D. Along tangent
100	A voltmeter is always connected in	A. Parallel B. Series C. Perpendicular D. Straight line
101	Which one of the following resistance is used to convert a Galvanometer into an	A. High resistance B. Low resistance in series with galvanometer

101	ammeter.	C. Shunt D. High resistance in series with galvanometer
102	Shunt resistance is	A. Low resistance B. Zero resistance C. High resistance D. Impedance
103	Which one has the least resistance.	A. Galvanometer B. Ammeter C. Ohm meter D. Volta meter
104	Useful device to measure resistance, current and voltage is an electronic instrument called.	A. Volt meter B. Ammeter C. Ohmmeter D. Digital Multimeter
105	An AVO meter can also be called as.	A. Digital multimeter B. Digital voltmeter C. Digital ammeter D. Digital ohm meter