SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

Q.1 Four possible answers A, B, C & D to each question are given. Circle the correct one. (20x1=20)

1 If the medium between the charges is not free space then electrostatic force will:
(A) Increase (B) Decrease (C) Remain same (D) None of these

2 If time constant inRC series circuit is small, then capacitor is charged or discharged:
(A) Slowly (B) Rapidly (C) At constant rate (D) Intermittently

3 The thermistors convert changes of temperature into:
(A) light energy (B) Electric voltage (C) Heat (D) Sound

4 Resistance tolerance of silver band is:
(A) 10% (B) 6% (C) 7% (D) 5%

5 The magnetic force is simply a:
(A) Reflecting force (B) Deflecting force (C) Restoring force (D) Gravitational force

6 The magnetic force on an electron traveling with velocity 10^8 ms^{-1} perpendicular to magnetic field of strength 1 $Wb.m^{-2}$ is:
(A) $2 \times 10^{-11} N$ (B) $1.6 \times 10^{-11} N$ (C) $5 \times 10^{-11} N$ (D) Zero

7 When the back emf in a circuit is zero it draws:
(A) Zero current (B) Minimum current (C) Maximum current (D) Steady current

8 A step up transformer is used 120 v line to provide 240 v. If primary coil has 100 turns the number of turns is secondary is:
(A) 50 (B) 100 (C) 150 (D) 200

9 The sum of positive and negative peak value is called:
(A) R.M.S value (B) P-P value (C) Peak value (D) Average value

10 The slope of q-t curve at any instant of time gives:
(A) current (B) Voltage (C) Charge (D) Both A and B

11 At resonance, the behavior of R-L-C series circuit is:
(A) Resistive (B) Capacitive (C) Inductive (D) Modulative

12 Minority carriers in p-types, substances are:
(A) Holes (B) Electrons (C) Protons (D) Portions

13 The central region of a transistor is called:
(A) Base (B) Emitter (C) Collector (D) Neutral

14 Ballmer series lies in:
(A) Visible region (B) Invisible region (C) Ultraviolet region (D) Infrared region

15 First spectral series of hydrogen atom was discovered by:
(A) Lyman (B) Rydberg (C) Balmer (D) Paschen

16 If transition of electron in hydrogen atom ends at third orbit then radiation emitted lies in:
(A) Balmer (B) Lyman (C) Paschen (D) Bracket

17 We can find from de Broglie formula:
(A) Wavelength (B) Amplitude (C) Speed of wave (D) Frequency of wave

18 The charge on $\beta - particle$ is:
(A) +e (B) -e (C) -2e (D) None of these

19 Speed of **β** particles is nearly equal to:
(A) $1 \times 10^8 m/s$ (B) $1 \times 10^7 m/s$ (C) $3 \times 10^8 m/s$ (D) $10^{16} m/s$

20 Two down and one up quacks make:
(A) Proton (B) Neutron (C) Photon (D) Positron

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

MCQs Ans Key

Q:1 (B)	Q:2 (B)	Q:3 (B)	Q:4 (A)	Q:5 (B)	Q:6 (B)
Q:7 (C)	Q:8 (D)	Q:9 (B)	Q:10 (A)	Q:11 (A)	Q:12 (B)
Q:13 (A)	Q:14 (A)	Q:15 (C)	Q:16 (C)	Q:17 (A)	Q:18 (B)
Q:19 (A)	Q:20 (A)				

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

Q.1 Four possible answers A, B, C & D to each question are given. Circle the correct one. (20x1=20)

1 The value of charge on 1.0×10^7 electrons is:
(A) 1.6×10^{-12} C (B) $1.6 \times 10^{+11}$ C (C) 1.6×10^{-19} C (D) $1.6 \times 10^{+19}$ C

2 Electric field intensity at a point is defined by the relation:
(A) $E = \frac{q}{F}$ (B) $E = \frac{F}{q}$ (C) E = qF (D) $E = \frac{F}{q^2}$

3 The thermistors convert changes of temperature into:
(A) light energy (B) Electric voltage (C) Heat (D) Sound

4 In order to increase the range of voltmeter R_H is:
(A) Increased (B) Decreased (C) Unchanged (D) Increased by 4 times

5 Energy density in an inductor is:
(A) Directly proportional to magnetic field. (B) Directly proportional to square of magnetic field.
(C) Inversely proportional to magnetic field. (D) Inversely proportional to square of magnetic field.

6 If a step-up transformer were 100% efficient , the primary and secondary wingings would have the same:
(A) Current (B) Power (C) Voltage (D) Direction of winding

7 The range of F.M transmission frequencies is from:
(A) 540 kHz to 1600 kHz (B) 88 kHz to 10.8 kHz (C) 88 MHz to 108 MHz (D) 540 MHz to 1600 MHz

8 In glass, molecules are irregularly arranged so it is known as:
(A) Solid (B) Liquid (C) Solid liquid (D) Gas

9 Above the curie temperature iron is:
(A) Paramagnetic (B) Diamagnetic (C) Ferromagnetic (D) Not effected

10 Light emitting diodes (LED) are made from semiconductors.
(A) Silicon (B) Germanium (C) Carbon (D) Gallium arsenide

11 For normal operation of transistor, the emitter-base junction is always:
(A) Forward Biased (B) Reverse Biased (C) Unbiased (D) Grounded

12 For non-inverting amplifier if $R_1 = \infty\, Ohm$, $R_2 = 0\, Ohm$ then gain of amplifier is: (MTN)-14
(A) -1 (B) 0 (C) +1 (D) Infinite

13 $X = A + B$ is the mathematical notation for:
(A) OR gate (B) NOR gate (C) NAND gate (D) AND gate

14 At higher energies more than 1.02 Mev the dominant process is:
(A) Photo electric effect (B) Compton effect (C) Pair production (D) Nuclear fission.

15 Ballmer series lies in:
(A) Visible region (B) Invisible region (C) Ultraviolet region (D) Infrared region

16 Balmer empirical formula explains the electromagnetic radiation of any excited atom in terms of their:
(A) Energy (B) Mass (C) Wavelength (D) Momentum

17 Paschen series lies in the:
(A) Far-ultraviolet region (B) Visible region (C) Infrred region (D) Ultravoilet region

18 Earth orbital speed is:
(A) 10 km/s (B) 20 km/s (C) 30 km/s (D) 40 km/s

19 The typical nuclei have diameter less than:
(A) 10^{-14} m (B) 10^{-12} m (C) 10^{-10} m (D) 10^{-8} m

20 A device that shows the visible path of ionizing particle is called:
(A) GM counter (B) Solid state detector (C) Scalar (D) Wilson Cloud chamber

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

MCQs Ans Key

Q:1 (A)	Q:2 (B)	Q:3 (B)	Q:4 (A)	Q:5 (B)	Q:6 (B)
Q:7 (C)	Q:8 (C)	Q:9 (A)	Q:10 (D)	Q:11 (A)	Q:12 (C)
Q:13 (B)	Q:14 (C)	Q:15 (A)	Q:16 (C)	Q:17 (C)	Q:18 (C)
Q:19 (C)	Q:20 (D)				

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

Q.1 Four possible answers A, B, C & D to each question are given. Circle the correct one. (20x1=20)

1 mho-m^{-1} is the Unit of:
(A) Resistance (B) Resistivity (C) Conductance (D) Conductivity

2 The magnetic force on an electron traveling with velocity 10^8 ms^{-1} perpendicular to magnetic field of strength 1 $Wb.m^{-2}$ is:
(A) $2 \times 10^{-11} N$ (B) $1.6 \times 10^{-11} N$ (C) $5 \times 10^{-11} N$ (D) Zero

3 When a charged particle is projected opposite to the direction of magnetic field, it experiences a force equal to:
(A) $qvB\cos\theta$ (B) qvB sin 90° (C) qvB (D) zero

4 Useful device to measure resistance, current and voltage is an electronic instrument called:
(A) Voltmeter (B) Ammeter (C) Ohmmeter (D) Digtial Multimeter

5 Which expression for mutual inductance is correct?
(A) $M = \frac{N_s \phi_s}{I_p}$ (B) $M = \frac{\phi_s}{N_s I_p}$ (C) $M = \frac{I_p}{N_s \phi_s}$ (D) $M = \frac{N_s}{I_p \phi_s}$

6 The term $\frac{\triangle \phi}{\triangle t}$ has the same dimensions as:
(A) Flux (B) Potential difference (C) Time (D) Current

7 The basic circuit element in A.C circuit which controls current:
(A) Resistor only (B) Capacitor only (C) Inductor only (D) All of these

8 In RLC series circuit the phase angle between X_L and Xc is:
(A) $tan^{-1}\frac{\omega c}{R}$ (B) $tan^{-1}\frac{\omega}{RC}$ (C) $tan^{-1}\frac{\omega z}{RC}$ (D) $\pi\, rad$

9 In RLC series circuit, at higher frequencies:
(A) $X_L = X_C$ (B) $X_L > X_C$ (C) $X_L < X_C$ (D) $X_L = 0$

10 A semiconductor will behave as an insulator at temperature:
(A) 20 K (B) 10 K (C) 5 K (D) 0 K

11 The potential barriers for germanium at room temperature is:
(A) 0.3 V (B) 0.5 V (C) 0.7 V (D) 0.9 V

12 A Sensor of Light is:
(A) Transistor (B) LED (C) Diode (D) LDR

13 $X = A + B$ is the mathematical notation for:
(A) OR gate (B) NOR gate (C) NAND gate (D) AND gate

14 If an object moves with speed of light its mass will be.
(A) Zero (B) Maximum (C) Minimum (D) Infinity

15 The change in wavelength of scattered photon in Compton effect is:
(A) $\frac{h}{m_o c}(1 - Cos\theta)$ (B) $\frac{h}{m_o c^2}(1 - Cos\theta)$ (C) $\frac{m_o}{hc}(1 - Cos\theta)$ (D) $\frac{h}{m_o c^2}(1 - Cos\theta)$

16 Compton's shift for wavelength is maximum for scattering angle θ =.
(A) 0^o (B) 90^o (C) 45^o (D) 180^o

17 Which series lies in the ultraviolet region:
(A) Ballmer series (B) Bracket series (C) Ptund series (D) Lyman series

18 The longest wavelength of Paschen series is:
(A) 656 nm (B) 1094 nm (C) 1875 nm (D) 2000 nm

19 Atom can reside in meta stable state for:
(A) $10^{-1} s$ (B) $10^{-2} s$ (C) $10^{-3} s$ (D) $10^{-4} s$

20 The types of quacks are:
(A) 2 (B) 3 (C) 4 (D) 6

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

MCQs Ans Key

Q:1 (D)	Q:2 (B)	Q:3 (D)	Q:4 (D)	Q:5 (A)	Q:6 (B)
Q:7 (D)	Q:8 (A)	Q:9 (B)	Q:10 (D)	Q:11 (A)	Q:12 (D)
Q:13 (B)	Q:14 (B)	Q:15 (A)	Q:16 (B)	Q:17 (D)	Q:18 (C)
Q:19 (C)	Q:20 (D)				

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

Q.1 Four possible answers A, B, C & D to each question are given. Circle the correct one. (20x1=20)

1 The force between two similar unit charges placed one meter apart in air is:
(A) Zero (B) One Newton (C) $9 \times 10^{9} N$ (D) $9 \times 10^{-9} N$

2 The maximum power (pout) is delivered to a load resistance R, when the internal resistance of the source is:
(A) $r = \propto$ (B) $r = R$ (C) $r = 0$ (D) $r = \frac{R}{4}$

3 An ideal current source shall have resistance:
(A) Zero (B) Finite but not zero (C) Infinte (D) Depend upon requirement

4 The value of e/m is smallest for:
(A) Proton (B) Electron (C) $\beta - particle$ (D) Positron

5 Maximum emf generated in a generator is:
(A) $\epsilon_o = \epsilon \sin\theta$ (B) $\epsilon = \epsilon_o \sin\theta$ (C) $\epsilon_o = N\omega AB\, sin\theta$ (D) $\epsilon_o = N\omega AB$

6 The basic circuit element in A.C circuit which controls current:
(A) Resistor only (B) Capacitor only (C) Inductor only (D) All of these

7 In three phase voltage across any two lines is about:
(A) 220 V (B) 230 V (C) 400 V (D) 430 V

8 In frequency modulation, which factor is changed:
(A) Amplitude of charge carriers (B) Frequeny of charge carriers (C) Amplitude of signal (D) Frequeny of signal

9 The number of crystal system are:
(A) Three (B) Five (C) Seven (D) Fifteen

10 Number of diodes used in half-wave rectifier circuit are:
(A) 4 (B) 3 (C) 2 (D) 1

11 A device which converts low voltage or current to high voltage or current is called:
(A) Transformer (B) AC-generator (C) Rectifier (D) Amplifier

12 $X = A + B$ is the mathematical notation for:
(A) OR gate (B) NOR gate (C) NAND gate (D) AND gate

13 Rest mass of photon is:
(A) Equal to electron (B) Zero (C) Equal to proton (D) Equal to neutron

14 The shortest wave length in Bracket series has wave length:
(A) $\frac{16}{R_H}$ (B) $\frac{R_H}{16}$ (C) $16 R_H$ (D) $4 R_H$

15 The energy required to remove completely an electron from the first bohr orbit is:
(A) Ionization energy (B) Excitation energy (C) Kinetic energy (D) Potential energy

16 Atom can reside in meta stable state for:
(A) $10^{-1} s$ (B) $10^{-2} s$ (C) $10^{-3} s$ (D) $10^{-4} s$

17 Number of isotopes of Neon gas are:
(A) 2 (B) 3 (C) 4 (D) 1

18 When a nucleus emits alpha particle its atomic mass decreases by:
(A) 1 (B) 2 (C) 3 (D) 4

19 Which of the following is typical source of ∝-particle:
(A) Strontium-94 (B) Radon-222 (C) Cobalt-60 (D) Zic sulphate

20 The particles equal or greater in mass than of protons are called:
(A) Baryons (B) Leptons (C) Mesons (D) Quarks

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

MCQs Ans Key

Q:1 (C)	Q:2 (B)	Q:3 (A)	Q:4 (A)	Q:5 (D)	Q:6 (D)
Q:7 (C)	Q:8 (B)	Q:9 (A)	Q:10 (D)	Q:11 (D)	Q:12 (B)
Q:13 (B)	Q:14 (A)	Q:15 (A)	Q:16 (C)	Q:17 (B)	Q:18 (B)
Q:19 (B)	Q:20 (A)				

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

Q.1 Four possible answers A, B, C & D to each question are given. Circle the correct one. (20x1=20)

1 The force between two similar unit charges placed one meter apart in air is:
(A) Zero (B) One Newton (C) $9 \times 10^{9} N$ (D) $9 \times 10^{-9} N$

2 If the distance between two point charges is halved, the electric intensity becomes.
(A) Half (B) $\frac{1}{4}$ times (C) double (D) 4 time

3 The amount of energy equal to 1.6 x 10^{-19}J is called:
(A) One volt (B) One milli volt (C) One electron volt (D) One mega electron volt

4 The current flowing through each resistor of equal resistance in parallel combination is:
(A) Same (B) Different (C) Zero (D) infinite

5 Resistivity at a given temperature depends upon:
(A) Area of cross section (B) length (C) Nature of material of conductor (D) Both lenght and Area.

6 The motional emf is given by:
(A) qUB (B) IBL (C) eBL (D) VBL

7 The motional emf depends upon the:
(A) Length of conductor (B) Speed of conductor (C) Strength of magnet (D) All of these

8 The self inductance of solenoid is:
(A) $L = \mu_o nAL$ (B) $L = \mu_o N^2 AI$ (C) $L = \mu_o n^2 AI$ (D) $L = \mu_o NAL$

9 Output of D.C motor is:
(A) A.C energy (B) Mechanical energy (C) Chemical energy (D) D.C energy

10 Good conductors have conductivities of the order of:
(A) $10^{-7}(\Omega m)^{-1}$ (B) $10^{7}(\Omega m)^{-1}$ (C) $10^{2}(\Omega m)^{-1}$ (D) $10^{-2}(\Omega m)^{-1}$

11 A pentavelent impurity is:
(A) Boron (B) Alumimium (C) Indium (D) Phosphorous

12 A pn-Junction can not be used as:
(A) Rectifier (B) Amplifier (C) Detector (D) LED

13 The materialization of energy take place in the process of:
(A) Photoelectric Effect (B) Compton Effect (C) Pair production (D) Annihilation of Matter

14 The speed of an electron in nth orbit is given as:
(A) $4\pi^2 Ke^2/nh$ (B) $2\pi Ke^2/nh$ (C) $2\pi Ke^2/n^2h^2$ (D) $2\pi^2 Ke^2/nh$

15 X-ray diffraction reveals that these are:
(A) Particle type (B) Wave type (C) Both wave and particle (D) None of above

16 X-rays are the electromagnetic radiations having the wavelength in range:
(A) 10^{-12} m (B) 10^{-10} m (C) 10^{-8} (D) 10^{-6} m

17 In meta stable state electron stays for:
(A) $10^{-1} s$ (B) $10^{-2} s$ (C) $10^{-3} s$ (D) $10^{-4} s$

18 Which one of the following is not affected by electric or magnetic field?
(A) $\beta - rays$ (B) $\gamma = rays$ (C) $\infty - rays$ (D) Electron

19 How many times, the $\alpha - particle$ is more massive than electrons?
(A) 6332 (B) 7332 (C) 8332 (D) 9332

20 The particles which do not experience strong force are called:
(A) Baryons (B) Hadrons (C) Mesons (D) Leptons

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

MCQs Ans Key

Q:1 (C)	Q:2 (D)	Q:3 (C)	Q:4 (B)	Q:5 (D)	Q:6 (D)
Q:7 (D)	Q:8 (C)	Q:9 (B)	Q:10 (B)	Q:11 (D)	Q:12 (B)
Q:13 (C)	Q:14 (B)	Q:15 (C)	Q:16 (B)	Q:17 (C)	Q:18 (B)
Q:19 (B)	Q:20 (D)				

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

Q.1 Four possible answers A, B, C & D to each question are given. Circle the correct one. (20x1=20)

1 Two charges 1μc and 5μc separated by 20 cm, the ratio of electoral forces acting on them will be:
(A) 1:2 (B) 1:5 (C) 1:1 (D) 5:1

2 If $F_1$and F_2 are the magnetic forces acting on α-particle and electron respectively, when moving perpendicular to the magnetic field then:
(A) $F_1 = F_2$ (B) $F_1 > F_2$ (C) $F_1 < F_2$ (D) $F_1 = 4F_2$

3 In case of photocopier, a special dry , black powder called toner is given by:
(A) Positive charge (B) Negative charge (C) Neutral (D) First positive than negative

4 Special organ called ampullae of lorenzini that are very sensitive to electric field are found in:
(A) Bats (B) Cats (C) Dogs (D) Sharks

5 Charge carriers in electrolytes are:
(A) Protons (B) Electrons (C) Holes (D) Positive and Negative ions

6 If a charged body is moved against the electric field it will gain:
(A) Elastic Potential Energy (B) Kinetic Energy (C) Gravitational Energy (D) Electric Potential Energy

7 When a wire of resistance R is cut in two equal parts its resistance becomes $\frac{R}{2}$ what happens to resistivity:
(A) Double (B) Same (C) Half (D) One fourth

8 A charged particle enters in a strong magnetic field its K.E:
(A) Remain constant (B) Increases (C) Decreases (D) Increases then decreases

9 A device used for detectino of current is called:
(A) Inductor (B) Voltmeter (C) Capacitor (D) Galvanometer

10 A voltmeter is always connected in:
(A) Parallel (B) Series (C) Perpendicular (D) Straight line

11 When a conductor moves across a magnetic field, an emf is set up, this emf is called:
(A) Variable emf (B) Constant emf (C) Back emf (D) Induced emf

12 The term has the same units as:
(A) Time (B) Current (C) Electromotive force (D) Magnetic flux

13 The substances in which the atoms do not form magnetic dipoles are called:
(A) Diamagnetic (B) Para magnetic (C) Ferro magnetic (D) Crystal

14 Glass and High Steel Carbon are example of:
(A) Ductile substances (B) Brittle substances (C) Soft substances (D) Hard substances

15 Which is not a basic logic operation?
(A) NOT (B) AND (C) OR (D) NAND

16 1 Kg mass will be equivalent to energy:
(A) $9 \times 10^8 J$ (B) $9 \times 10^{12} J$ (C) $9 \times 10^{16} J$ (D) $9 \times 10^{19} J$

17 The charge on an alpha particle is equal to:
(A) +e (B) -e (C) -2e (D) 2e

18 Nuclear fission chain reaction is controlled by using:
(A) Cadmium rods (B) Iron rods (C) Platinum rods (D) Steel rods

19 The most useful tracer is:
(A) Strontium -90 (B) Iodine-31 (C) Cobalt-60 (D) Carbon-14

20 Various types of cancer are treated by:
(A) Carbon-14 (B) Nickel-63 (C) Cobalt-60 (D) Strontium-90

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

MCQs Ans Key

Q:1 (C)	Q:2 (B)	Q:3 (B)	Q:4 (D)	Q:5 (D)	Q:6 (D)
Q:7 (B)	Q:8 (A)	Q:9 (D)	Q:10 (A)	Q:11 (D)	Q:12 (C)
Q:13 (D)	Q:14 (B)	Q:15 (D)	Q:16 (C)	Q:17 (D)	Q:18 (A)
Q:19 (D)	Q:20 (C)				

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

Q.1 Four possible answers A, B, C & D to each question are given. Circle the correct one. (20x1=20)

1 The net charge on a capacitor (each plate having magnitude of charge of charge q) is:
(A) Infinity (B) 2 q (C) q/2 (D) Zero

2 The SI Unit of resistivity is:
(A) Ωm^{-2} (B) *[Math Processing Error]* (C) Ωm (D) Ω

3 When a wire of resistance R is cut in two equal parts its resistance becomes $\frac{R}{2}$ what happens to resistivity:
(A) Double (B) Same (C) Half (D) One fourth

4 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.

5 The magnetic induction has the same unit as of:
(A) Flux (B) Flux density (C) Electric intensity (D) Magnetization

6 The e/m of a neutron is:
(A) less than electron (B) zero (C) greater than election (D) the same as electron

7 A.C generator based upon the:
(A) Lenz's Law (B) Maxwell's relation (C) Faradays Law of electromagnet induction. (D) Mutual induction.

8 Commutators are used in:
(A) D.C. generators (B) A.C. generators (C) A.C. motor (D) A.C. rotator

9 Transfomer is an electrical device used to change:
(A) Alternating Current (B) Direct Current (C) Alternating emf (D) Voltage

10 A transformer steps 220V to 40V, if the secondary turns are 40 and then primary turns are:
(A) 20 (B) 40 (C) 120 (D) 220

11 The capacitance required to construct a resonance circuit of frequency 1000 kHz with an inductor of 5 mH is:
(A) 5.09 pF (B) 5.09 μF (C) 5.09 mF (D) 50.9 pF

12 When a metal detector comes close to a metal then its frequency:
(A) Becomes double (B) Remains same (C) Becomes half (D) Increases

13 Which one belongs to trivalent group?
(A) Aluminium (B) Antimony (C) Phosphorous (D) Arsenic

14 In p-type substances, the majority charge carriers:
(A) Electrons (B) Proton (C) Holes (D) Neutrons

15 The critical temperature of mercury is:
(A) 1.18 K (B) 4.2 K (C) 3.72 K (D) 7.2 K

16 Pulsating output of full wave rectifier can be made smooth by using circuit called:
(A) Filter (B) Amplifier (C) Resistor (D) Transistor

17 Rest mass of photon is:
(A) Equal to electron (B) Zero (C) Equal to proton (D) Equal to neutron

18 The number of Neutron in $^{238}_{92}U$ is:
(A) 92 (B) 238 (C) 146 (D) 330

19 Marie Curie and Pierre Curie discovered:
(A) 3.8 minutes (B) 3.8 days (C) 3.8 months (D) 3.8 years

20 In nuclear radiations, track of $\alpha - particle$ is:
(A) Thin (B) Discontinuous (C) Erratic (D) Continuous

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

MCQs Ans Key

Q:1 (D)	Q:2 (C)	Q:3 (B)	Q:4 (A)	Q:5 (B)	Q:6 (B)
Q:7 (C)	Q:8 (A)	Q:9 (C)	Q:10 (D)	Q:11 (D)	Q:12 (B)
Q:13 (A)	Q:14 (C)	Q:15 (B)	Q:16 (A)	Q:17 (B)	Q:18 (C)
Q:19 (B)	Q:20 (D)				

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

Q.1 Four possible answers A, B, C & D to each question are given. Circle the correct one. (20x1=20)

1 For computation of electric flux, the surface area should be.
(A) Parallel (B) Flat (C) Curved (D) Spherical

2 A charge of 10^{-10} C between two parallel plates 1 cm apart experience a force of 10^{-5} N:
(A) 10 V (B) 10^2 V (C) 10^3 V (D) 10^4 V

3 A charged conductor has charge on its.
(A) Inner-surface (B) outer-surface (C) middle-surface (D) surrounding space

4 Temperature Co-efficient of resistivity is measured in:
(A) K (B) K^{-1} (C) π (D) ^oC

5 The Unit of magnetic flux is:
(A) Tesla (B) Weber (C) $Weber\, m^{-2}$ (D) $Tesla\, m^2$

6 A cross (×) represents the direction of magnetic field:
(A) Out of page (B) Tangent to page (C) Parallel to page (D) In to the page

7 The magnetic induction has the same unit as of:
(A) Flux (B) Flux density (C) Electric intensity (D) Magnetization

8 When a conductor moves across a magnetic field, an emf is set up, this emf is called:
(A) Variable emf (B) Constant emf (C) Back emf (D) Induced emf

9 Energy density in an inductor is:
(A) Directly proportional to magnetic field. (B) Directly proportional to square of magnetic field.
(C) Inversely proportional to magnetic field. (D) Inversely proportional to square of magnetic field.

10 In RLC series circuit, the condition for resonance is:
(A) $X_L < X_C$ (B) *[Math Processing Error]* (C) $Z > X_C$ (D) $X_L = X_C$

11 Metal detector consists of:
(A) L-C circuit (B) R-L circuit (C) R-C circuit (D) RLC series circuit

12 Which one is not a crystalline solid?
(A) Zinc (B) Copper (C) Nylon (D) Zirconia

13 Potential difference across depletion region in case of silicon diode at room temperature is:
(A) 0.3 V (B) 0.9 V (C) 0.7 V (D) zero Volts

14 The stopping potential for a certain metal is 10 volts. Thus work function for the cathode is:
(A) $10J$ (B) $1.6\times10^{-18}J$ (C) $1.6\times10^{-19}J$ (D) $1.6\times10^{-20}J$

15 If we have N_o number of atoms of any radioactive element, then after four half lives, the number of atoms left behind is:
(A) $\frac{1}{4}N_o$ (B) $\frac{1}{8}N_o$ (C) $\frac{1}{16}N_o$ (D) $\frac{1}{2}N_o$

16 Which particle has larger range in air?
(A) $\alpha-rays$ (B) $\gamma-rays$ (C) $\beta-rays$ (D) Neutron

17 Which of the following is similar to electron?
(A) $\beta-particle$ (B) $\alpha-particle$ (C) Neutron (D) Proton

18 Hydrogen bomb is an example of:
(A) Nuclear fission (B) Nuclear fusion (C) Chain reation (D) Chemical reaction

19 The background radiation to which we are exposed, on the average is:
(A) 1 mSv per year (B) 2 mSv per year (C) 3 mSv per year (D) 4 mSv per year

20 Cosmic rays consist of:
(A) Protons (B) High energy photons (C) Positrons (D) All of above

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

MCQs Ans Key

Q:1 (B)	Q:2 (C)	Q:3 (A)	Q:4 (C)	Q:5 (B)	Q:6 (D)
Q:7 (B)	Q:8 (D)	Q:9 (B)	Q:10 (D)	Q:11 (A)	Q:12 (C)
Q:13 (C)	Q:14 (B)	Q:15 (C)	Q:16 (B)	Q:17 (A)	Q:18 (B)
Q:19 (B)	Q:20 (D)				

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

Q.1 Four possible answers A, B, C & D to each question are given. Circle the correct one. (20x1=20)

1 Two charges 1μc and 5μc separated by 20 cm, the ratio of electoral forces acting on them will be:
(A) 1:2 (B) 1:5 (C) 1:1 (D) 5:1

2 If both the magnitude of charges and distance between them is doubled, then coulomb's force will be:
(A) Doubled (B) Half (C) Remain same (D) one fourth

3 If the distance between two point charges is halved, the electric intensity becomes.
(A) Half (B) $\frac{1}{4}$ times (C) double (D) 4 time

4 An ECG records the between points on human skin generated by electric process in the heart:
(A) Heart beat (B) Pulse rate (C) Pressure (D) Voltage

5 Due to polarization, electric field E.
(A) Increases (B) Decreases (C) First increases then decreases (D) Remian same

6 A wire of uniform area of cross-section A, length L and resistance R is cut into two equal parts. The resistivity of each part.
(A) is doubled (B) remains the same (C) is halved (D) is one-fourth

7 The unit of E 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) $m^{-1}s^{-1}$

8 The relation of emfs of two cells $\frac{E_1}{E_2}$ is:
(A) $\frac{I_2}{I_1}$ (B) $\frac{I_1}{I_2}$ (C) $\frac{1}{I_1 I_2}$ (D) $I_1 \times I_2$

9 Energy stored in the inductor is in the form of:
(A) Electrical energy (B) Magnetic energy (C) Kinetic energy (D) Chemical energy

10 The phase of A.C at positive peak from origin is:
(A) $\frac{3\pi}{2}$ (B) $\frac{\pi}{2}$ (C) $\frac{\pi}{4}$ (D) π

11 The impedance Z can be expressed as:
(A) $Z = \frac{V_{rms}}{I_{rms}}$ (B) $Z = \frac{I_{rms}}{V_{rms}}$ (C) $Z = I + V$ (D) $Z = I - V$

12 In RLC series circuit at resonance the phase difference between capacitor and inductor reactances is:
(A) 90° (B) 270° (C) 0° (D) 180°

13 Three are different crystal systems. The number of these crystal system is:
(A) 3 (B) 4 (C) 5 (D) 7

14 The SI unit of stress is same as that of:
(A) Pressure (B) Force (C) Momentum (D) Work

15 Conductors have conductivities of the order of:
(A) $10^3(\Omega m)^{-1}$ (B) $10^7(\Omega m)^{-1}$ (C) $10^5(\Omega m)^{-1}$ (D) $10^9(\Omega m)^{-1}$

16 A single domain in ferromagnetic substance contains nearly.
(A) $10^8 \rightarrow 10^9$ (B) $10^{12} \rightarrow 10^{16}$ (C) $10^{15} \rightarrow 10^{20}$ (D) $10^{12} \rightarrow 10^{20}$

17 A two inputs NAND gate with inputs A and B has an output "0" if:
(A) B is zero (B) A is zero (C) Both A and B are 1 (D) Both A and B are "0"

18 Unit of Plank's constant is same as that of:
(A) Acceleration (B) Angular momentum (C) Linear momentum (D) Entropy

19 Energy of black body radiation depends upon:
(A) Nature of surface of body (B) Nature of material of body (C) Shape and size of body
(D) Temperature of the body

20 The radius of first shell of hydrogen atom was quantized which is:
(A) 0.0053 nm (B) 0.0053 nm (C) 0.53 nm (D) 0.053 nm

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

MCQs Ans Key

Q:1 (C)	Q:2 (C)	Q:3 (D)	Q:4 (D)	Q:5 (B)	Q:6 (B)
Q:7 (C)	Q:8 (B)	Q:9 (B)	Q:10 (B)	Q:11 (A)	Q:12 (D)
Q:13 (D)	Q:14 (A)	Q:15 (B)	Q:16 (B)	Q:17 (C)	Q:18 (D)
Q:19 (D)	Q:20 (D)				

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

Q.1 Four possible answers A, B, C & D to each question are given. Circle the correct one. (20x1=20)

1 The thermistors convert changes of temperature into:
(A) light energy (B) Electric voltage (C) Heat (D) Sound

2 A 5 m wire carrying current 2 A at right angle to uniform magnetic field of 0.5 T. The force on the wire is:
(A) 1.5 N (B) 5 N (C) 2.5 N (D) 4 N

3 The SI unit of flux density is:
(A) Gauss (B) Tesla (C) Weber/meter (D) Weber

4 Magnetic flux density at a point due to current carrying coil is determined by:
(A) Ampere's Law (B) Gauss's Law (C) Faraday's Law (D) Lenz's Law

5 When a conductor moves across a magnetic field, an emf is set up, this emf is called:
(A) Variable emf (B) Constant emf (C) Back emf (D) Induced emf

6 In A.C. generator, when plane of coil is perpendicular to magnetic field, then output of generator is:
(A) $N\omega AB$ (B) $2\pi f$ (C) maximum (D) Zero

7 At resonance frequency, the impedance of RLC series circuit is:
(A) Maximum (B) Minimum (C) Zero (D) Infinite

8 A single domain in ferromagnetic substance contains nearly.
(A) $10^8 \rightarrow 10^9$ (B) $10^{12} \rightarrow 10^{16}$ (C) $10^{15} \rightarrow 10^{20}$ (D) $10^{12} \rightarrow 10^{20}$

9 After curie temperature, iron is:
(A) Ferromagnetic (B) Paramagnetic (C) Diamagnetic (D) Magnetic

10 Curie temperature for iron is:
(A) $710^o C$ (B) $730^o C$ (C) $750^o C$ (D) $780^o C$

11 The number of terminals in a semiconductor diode are:
(A) 2 (B) 3 (C) 4 (D) 5

12 The device which are required to convert various physical quantities into electric voltage are called:
(A) Filters (B) Rectifiers (C) Amplifiers (D) Sensors

13 The special theory of relativity based on:
(A) one postulate (B) Two postulates (C) Three postulate (D) Four postulates

14 The energy of the 4th orbit in hydrogen atom is:
(A) -2.1 ev (B) -3.50 ev (C) -13.60 ev (D) -0.85 ev

15 The charge number of $^{56}_{141}\text{Ba}$ is:
(A) 197 (B) 141 (C) 85 (D) 56

16 What is different in isotopes:
(A) Number of protons (B) Number of neutrons (C) Number of electrons (D) Charge Number

17 If the following particles have the same energy, which particle has the shortest wave length?
(A) $\alpha - particle$ (B) Neutron (C) $\beta - particle$ (D) Proton

18 Which of the following is similar to electron?
(A) $\beta - particle$ (B) $\alpha - particle$ (C) Neutron (D) Proton

19 The quantity of U_{92}^{235} in the naturally occurring uranium is:
(A) 0.2 % (B) 0.3 % (C) 0.7 % (D) 0.4 %

20 Cosmic rays consist of:
(A) Protons (B) High energy photons (C) Positrons (D) All of above

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

MCQs Ans Key

Q:1 (B)	Q:2 (B)	Q:3 (B)	Q:4 (A)	Q:5 (D)	Q:6 (D)
Q:7 (B)	Q:8 (B)	Q:9 (B)	Q:10 (C)	Q:11 (A)	Q:12 (D)
Q:13 (B)	Q:14 (D)	Q:15 (D)	Q:16 (B)	Q:17 (B)	Q:18 (A)
Q:19 (C)	Q:20 (D)				

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

Q.1 Four possible answers A, B, C & D to each question are given. Circle the correct one. (20x1=20)

1 For which material medium, force between two charges particles is maximum?
(A) Ammonia (B) Germanium (C) Mica (D) Teflon

2 The force between two point charges separated by air in 4N when separated by a medium of relative permittivity 2, the force between them become:
(A) $\frac{1}{2}N$ (B) 2 N (C) 4 N (D) 8 N

3 If the distance between two charges is halved and charges are also doubled, then force between them will be:
(A) Two time (B) Four time (C) Eight time (D) Sixteen time

4 A rubber ball of radius 2 cm has a charge of 5 μC on its surface, which is uniformly distributed, the value of $\rightarrow E$ at its centre is:
(A) 10 NC^{-1} (B) Zero (C) 2.5 NC^{-1} (D) 5×10^{-6} NC^{-1}

5 A charge of 10^{-10} C between two parallel plates 1 cm apart experience a force of 10^{-5} N:
(A) 10 V (B) 10^2 V (C) 10^3 V (D) 10^4 V

6 If time constant inRC series circuit is small, then capacitor is charged or discharged:
(A) Slowly (B) Rapidly (C) At constant rate (D) Intermittently

7 Temperature Co-efficient of resistivity is measured in:
(A) K (B) K^{-1} (C) π (D) ^oC

8 mho-m^{-1} is the Unit of:
(A) Resistance (B) Resistivity (C) Conductance (D) Conductivity

9 What is the colour code for $52M\Omega \pm 5\%$ resistance:
(A) Red Green Blue Gold (B) Green Red Blue Gold (C) Yellow Red Blue Gold (D) Green Red Voilet Gold

10 Sensitivity of a galvanometer can be increased by:
(A) Decreasing the value of tersional couple. (B) Decreasing number of turns.
(C) Decreasing area of plane coil. (D) Decreasing magnetic field.

11 Energy stored in inductor is:
(A) $\frac{1}{2}LI^2$ (B) $\frac{1}{2}LI$ (C) $\frac{1}{2}L^2I$ (D) $\frac{1}{2}L^2I^2$

12 In A.C wave form, negative peak is obtained at the phase angle of:
(A) 90^o (B) 120^o (C) 270^o (D) 360^o

13 If the frequency of A.C supplied is doubled then the capacitive reactance becomes:
(A) Half (B) Two times (C) Four times (D) One fourth

14 When platinum is heated it becomes orange at:
(A) 500^oC (B) 900^oC (C) 1100^oC (D) 1300^oC

15 Energy of black body radiation depends upon:
(A) Nature of surface of body (B) Nature of material of body (C) Shape and size of body
(D) Temperature of the body

16 The energy of the photon of wavelength 500 nm is:
(A) 3.10 eV (B) 2.49 eV (C) 1.77 eV (D) 1.52 eV

17 The longest wavelength of Paschen series is:
(A) 656 nm (B) 1094 nm (C) 1875 nm (D) 2000 nm

18 The equation of Rydbery constant is given by:
(A) $R_H = \frac{h_c}{m_o}$ (B) $R_H = \frac{E_o}{hC}$ (C) $R_H = \frac{E_o}{\lambda}$ (D) $R_H = \frac{1}{hc}$

19 The typical nuclei have diameter less than:
(A) 10^{-14} m (B) 10^{-12} m (C) 10^{-10} m (D) 10^{-8} m

20 A pair of quark and quti quack makes a
(A) Meson (B) Harden (C) Lepton (D) Baryon

SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Roll#:		Class:	Inter Part-II
Subject:	Physics-12	Date:		Time:	
Test Detail:	Type 1 - MCQs Test - Marks=20				
Test Syllabus:	Full Book				

MCQs Ans Key

Q:1 (D)	Q:2 (B)	Q:3 (D)	Q:4 (B)	Q:5 (C)	Q:6 (B)
Q:7 (C)	Q:8 (D)	Q:9 (B)	Q:10 (A)	Q:11 (A)	Q:12 (C)
Q:13 (A)	Q:14 (C)	Q:15 (D)	Q:16 (B)	Q:17 (C)	Q:18 (B)
Q:19 (C)	Q:20 (A)				