Physics FSC Part 2 Chapter 18 Online MCQ's Test

Sr	Questions	Answers Choice
1	The average gap for Germanium at 0K is	A. 1.12 ev B. 0.02 ev C. 6.72 ev D. 7.2 ev
2	The impurity in the germinium is usually in the ratio of	A. 1:10⁶ B. 1:10⁴ C. 1:10⁸ D. 1:10¹⁰
3	The semi conductor diode has the property of	A. Two way conduction B. Zero conduction C. One way conduction D. Amplification
4	The potential difference across depletion region in case of Si is	A. 0.6 volt B. 0.9 volt C. 0.7 volt D. 0.2 volt
5	The circuit of full wave rectification consist of	A. Three diodes B. Four diodes C. Two diodes D. One diode
6	In a certain circuit, $I_B = 40\ \mu A$, $I_C = 20$ mA	A. 450 amp B. 0.45 amp C. 5 m amp D. 500 amp
7	The symbol of p-n-p transistor is	
8	For normal transistor the emitter current can be given by	A. I_E = I_C B. I_E = I_C + I_B C. I_E = I_B D. None of these
9	In case of op-amp as an inverting amplifier, $V_+ - V_- = 0$, this is because	A. Open gain loop is very low B. Closed loop gain is very high C. Open loop gain is very high D. Both (a) and (a)
10	An expression for gain of an inverting amplifier is	C. (R₁R₂) D. None of these
11	The mathematical symbol for NOR operation is	B. X = A . B C. X = A + D
12	The gate, which changes the logic level to its opposite level is called	A. NOR gate B. AND gate C. OR gate D. NOT gate
13	One use of a single p-n junction semiconductor in an electrical circuit is a	A. Rectifier B. Transistor C. Battery D. Diode
14	The output from a full wave rectifier is	A. An ac voltage B. A dc voltage C. Zero D. A pulsating unidirectional voltage
15	The chargeless region after formation of Pn junction is called:	A. Free region B. Depletion region C. Field region D. U.V region
16	The P.D develop in case of silicon is:	A. 0.7V B. 0.3V C. 0.5V D. 0.9V

17	The P.D develop in case of germanium is:	A. 0.3 B. 0.7 C. 0.5 D. 0.9
18	The p-n junction in which p side is connected to+ive and n-side is -ve the junction is said to be:	A. Neutral B. Forward biased C. Reversed biased D. None of above
19	In case of reverse biasing, current is flown due to:	A. Minority charge carriers B. Majority charge carriers C. Electrons D. Protons
20	Photodiode is used for:	A. Detection of current B. Detection of heat C. Detection of light D. Both a & b
21	Transistor was invented by:	A. Bardeen B. Micheal faraday C. Lenz D. Newton
22	A transistor has:	A. Two regions B. Three regions C. Single regions D. Four regions
23	Base of transistor is of order:	A. 10⁻¹¹m B. 10⁶m C. 10⁻⁸m D. 10⁻⁶m
24	Which one has greater cone of impurity among all:	A. Emitter B. Base C. Collector D. All are pure
25	For normal use:	A. Emitter base function is reversed biased B. Collector base junction is reserved biased C. Emitter base junction is forward biased D. Both c and b
26	NAND gate represented by:	A. X = A. B B. X = A+B C. X= A.B D. X=|A+B|
27	OR gate is represented by:	A. X = A+B B. X=A.B C. X=A+B D. X=A.B
28	Conversion of A.C into D.C is called:	A. Compton effect B. Rectification C. Amplification D. Pair production
29	A transistor has parts:	A. 2 B. 3 C. 4 D. 5
30	Which device is used as a rectifier?	A. Capacitor B. Transistor C. Diode D. Transformer
31	In an N-type silicon, which of the following statement is true?	A. Electrons are majority carriers & trivalent atoms are the dopants B. Electrons are majority carriers & pentavalent atoms are the dopants C. Holes are minority carriers & pentavalent atoms are the dopants. D. Holes are minority carriers & trivavalent atoms are the dopants.
32	The reverse saturation current in a PN junction diode is only due to:	A. Majority carriers B. Minoritycarriers C. Acceptor ions D. Donor ions
		A. Heavy loading of emitter current

33	Improper bisting of a transistor circiut produces:	B. Distortion in the output output signal C. Excessive heat at collector terminal D. Faculty location of load line
34	When transistor are used in digital circuits they usually operate in the :	A. Active region B. Break down region C. Saturation & cutoff regions D. Linear region
35	Most of the electrons in the base of an NPN transistor flow:	A. Out of the base lead B. Into the collector C. Into the emit D. Into the base supply
36	In a transistor, collector current is controlled by:	A. Collector voltage B. Base current C. Collector resistance D. All of the above
37	In a transistor, collector current is controlled by:	A. Collector voltage B. Base current C. Collector resistance D. All of the above
38	The potential barrier for silicon is.	A. 0.7 V B. 0.5 V C. 0.3 V D. 0.9 V
39	The potential difference across the depletion region of germanium is.	A. 0.3 V B. 0.5 V C. 0.7 V D. 0.8 V
40	Reverse current flows due to	A. Majority charge carriers B. Minority charge carriers C. Electrons D. Holes
41	When a PN-Junction is reverse biased the depletion region is.	A. Widened B. Narrowed C. Normal D. None of these
42	Which factor does not affect the conductivity of PN-Junction diode.	A. Doping B. Temperature C. Voltage D. Pressure
43	A diode characteristic curve is a plot between	A. Current and time B. Voltage and time C. Voltage and current D. Forward voltage and reverse voltage
44	A PN junction can not be sued a.	A. Rectifier B. Amplifier C. Detector D. LED
45	The ratio of potential barriers of Ge to Si at room temperatrue is.	A. 7:3 B. 1:3 C. 2:5 D. 3:7
46	Depletion region carries.	A. -ve charge B. +ve charge C. Ions D. No charge
47	A diode characteristics curve is a plot between	A. Current and resistance B. Voltage and time C. Voltage and current D. Current and time
48	_____ is the building block of every electronic circuit.	A. Semi conductor diode B. Resistor C. Capacitor D. Amplifier
49	Minimum number of semi conductor diodes required for full wave rectification are.	A. 1 B. 2 C. 3 D. 4
50	In full wave rectification number of diodes required are equal to.	A. 2 B. 3 C. 4

		D. 5
51	During negative half cycle of A.c then p-n junction offers.	A. High resistance B. Low resistance C. No resistance D. All of these
52	For rectification we use.	A. Transformer B. Diode C. Choke D. Generator
53	The output voltage of a rectifier is.	A. Smooth B. Pulsating C. Alternating D. Per featly direct
54	Pulsating output of full wave rectifier can be made smooth by using circuit called.	A. Filter B. Amplifier C. Resistor D. Transistor
55	A.C. can be converted into D.C. by	A. An oscillator B. Detector C. An amplifier D. Rectifier
56	Rectification is the process of converting.	A. D.C. into A.C. B. A.C. in to D.C. C. Low signal to high D. High signal to low
57	Conversation of only one half of A.C. into D.C. is called.	A. Half wave amplification B. Wave amplification C. Half wave electrification D. Half wave rectification
58	In photovoltaic cell, current is directly proportional to.	A. Wavelength of light B. Intensity of light C. Energy D. Frequency of light
59	Light emitting diodes are made from semiconductors.	A. Silicon B. Germanium C. Carbon D. Gallium arsenide
60	A light emitting diode emits light only when	A. Reverse biased B. Forward biased C. Unbiased D. None of these
61	The colour of light emitted by a LED depends on.	A. It forward biased B. Its reverse biased C. Unbiased D. None of these
62	Photo diode is used for detection of.	A. Heat B. Magnet C. Current D. Light
63	the number of terminals in a semiconductor diode are	A. 2 B. 3 C. 4 D. 5
64	Which diode works at reverse biasing.	A. LED B. Photo voltaic cell C. Photo diode D. Silicon diode
65	A photo diode can turn its current ON and OFF in	A. Micro seconds B. Mega seconds C. Nano seconds D. Mili seconds
66	Photo diode detects.	A. Visible light B. Radio waves C. X rays D. All of them
67	The ratio Beta in transistor is called.	A. Voltage gain B. Emitter gain C. Current gain D. Nuclear gain
68	Transistor was discovered by	A. Young B. Curie

68	Transistor was discovered by	C. John Bardeen D. Shale's
69	Transistors are made from	A. Plastics B. Metals C. Insulator D. Doped semi conductors
70	The central region of a transistor is called.	A. Emitter B. Collector C. Base D. Neutral
71	Which component of the transistor has greater contrition of impurity.	A. Base B. Emitter C. Collector D. Emitter and collector
72	Doping is made comparatively larger in	A. Emitter B. Base C. Collector D. P -type semi conductor
73	The sensor of light is.	A. Transistor B. LED C. Diode D. Light dependent resistance
74	A device which converts low voltage or current to high voltage or current is called.	A. Transformer B. AC generator C. Amplifier D. Rectifier
75	The gain of transistor amplifier depends upon	A. Resistance connected with collector B. Resistance connected with base voltage C. Input voltage D. Output voltage
76	Greater concentration of impurity is added in.	A. Base B. Emitter C. Collector D. LED
77	The open loop gain of the amplifier is order of.	A. 10⁶ B. 10⁵ C. 10⁷ D. 10³
78	Output resistance of an op amp is	A. High B. Low C. Zero D. Equal to input resistance
79	The input resistance of an op amplifier is.	A. Low B. High C. Zero D. Equal to output resistance
80	The resistance between the inverting (-) and non inverting inputs is called Input resistance and is the order of.	A. Ohms B. Kilo Ohms C. Mega Ohms D. Thounds Ohms
81	LDR becomes necessary when op amp is used as a	A. Night switch B. Inverter C. Comparator D. Rectifier
82	The use of LDR is in the circuit of.	A. Logic gate B. Rectifier C. Oscillator D. High Switch
83	Automatic function of street light can be done by the use of.	A. Inductor B. Rectifier C. Comparator D. emf
84	For automatic Switching of streetlight, the op amplifier is used as.	A. Inductor B. Converter C. Comparator D. Thermistor
85	Which is not fundamental logic gate.	A. NOT B. AND C. OR D. NAND

86	Truth table of logic function.	A. Summarize its output values only B. Tabulates all its input conditions only C. Display all its input and output possibility D. Is not base on logic algebra
87	The output of two input is zero only when its.	A. Both inputs are zero B. Either input is zero C. Both inputs are one D. Either input is one
88	Logic gate can control some physical parameters like.	A. Temperature, Pressure B. Resistance, Inductance C. Capacitance, Impedance D. Current, voltage
89	The term invertor is used for.	A. NOR gate B. XNOR gate C. NAND gate D. NOT gate
90	A two inputs NAND gat 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'
91	X=A+B is the mathematical notation for.	A. OR gate B. NOR gate C. NAND gate D. AND gate
92	The device which are required to convert various physical quantities into electric voltage are called.	A. Filters B. Rectifiers C. Amplifiers D. Sensors