

TTA SRD 2015

S.No	CHAPTER NAME	QUESTION_ENGLISH	CHOICE1	CHOICE2	CHOICE3	CHOICE4	Ans
1	PART-1(GENERAL ABILITY)	Pick the synonym for the word "Zeal"	Hazardous	Connotation	Passion	Initiation	3
2	PART-1(GENERAL ABILITY)	Pick the correct Antonym for the word "Validate"	Disprove	Approve	Prove	Authentic	1
3	PART-1(GENERAL ABILITY)	Pick the most suitable one word substitute: One who is unable to pay his debts	Optimist	Lapidist	Fatalist	Insolvent	4
4	PART-1(GENERAL ABILITY)	He is _____ European	a	an	The	None of these	1
5	PART-1(GENERAL ABILITY)	How many hours is IST ahead of GMT	+5:00	+5:30	+6:00	+6:30	2
6	PART-1(GENERAL ABILITY)	The state in India with less literacy rate as per 2011 census	Rajasthan	Jharkand	Arunachal Pradesh	Bihar	4
7	PART-1(GENERAL ABILITY)	The study of earth quake is known as	Sialogy	Seismology	Ecology	Theology	2
8	PART-1(GENERAL ABILITY)	Telecom Regulatory Authority of India (TRAI) was established in	1993	1995	1997	1999	3
9	PART-1(GENERAL ABILITY)	Moon revolves round the earth in _____ days	27	27 1/3	27 2/3	28	2
10	PART-1(GENERAL ABILITY)	The distance between the Two stumps of cricket pitch is	18 yards	22 meters	18 meters	22 yards	4
11	PART-1(GENERAL ABILITY)	The 2016 summer Olympics will be held in _____ country	China	India	Sri Lanka	Brazil	4
12	PART-1(GENERAL ABILITY)	The total number of digits in UIDAI Aadhar	12	13	14	15	1
13	PART-1(GENERAL ABILITY)	The author of the book "Rebooting Government"	Pranab Mukherjee	Arun Jatiley	Mannohan Singh	Nandan Nilekani	4
14	PART-1(GENERAL ABILITY)	Which Technology Giant has agreed to provide wi-fi hotspot at 500 Railway stations in India	Microsoft	Google	IBM	Wipro	2
15	PART-1(GENERAL ABILITY)	To whom, highest civilian award of the Indian Government " Bharat Ratna" was awarded during 2015	Sri. Prakash Singh Badal	Sri LK Advani	Smt. MS Subbulaksh mi	Sri Atal Bihari Vajpayee	4
16	PART-1(GENERAL ABILITY)	Which of the following personalities is known as "Metro Man"?	PV Chandran	Elattuvalapil Sreedharan	Tessy Thomas	Man Mohan sarma	2

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17	PART-I(GENERAL ABILITY)	Which Indian subsidy is world's largest direct benefit scheme?	LPG	Fertilizers	Food for work	Diesel	1
18	PART-1(GENERAL ABILITY)	At which place DRDO has set up the world's highest Terrestrial Research Centre?	Leh	Srinagar	Ladakh	Anantnag	3
19	PART-1(GENERAL ABILITY)	The 24-Km long Hirakud Dam is located at the border of	Orissa and Bihar	Orissa and Madhya Pradesh	Bihar and west Bengal	Madhya Pradesh and Jharkand	2
20	PART-1(GENERAL ABILITY)	The President of India can be removed from his office on the recommendation of the	Supreme Court	Chief Justice of India	Lok Sabha	Two Houses of Parliament	4
21	PART-II (BASIC ENGINEERING)	If $A^{-1} = A^{-1}$ , where A is real matrix, then A is	Normal	Symmetric	Hermitian	Orthogonal	4
22	PART-II (BASIC ENGINEERING)	The sum of two unit vectors is a unit vector. The magnitude of their difference is	2	$\sqrt{2}$	$\frac{1}{\sqrt{2}}$	1	2
23	PART-II (BASIC ENGINEERING)	The distance between the parallel lines $4x+6y+4=0$ and $4x+6y+5=0$ is	$\frac{1}{\sqrt{52}}$	$\sqrt{52}$	$\frac{1}{\sqrt{2}}$	1	1
24	PART-II (BASIC ENGINEERING)	Slope of the line $2x+3y+5=0$ is	2-Mar	-0.66666667	3-Feb	-1.5	2
25	PART-II (BASIC ENGINEERING)	Find the value of k, if the equation $3x^2 + 8xy + ky^2 = 0$ represents perpendicular lines	3	-3	0	8	2
26	PART-II (BASIC ENGINEERING)	The angle between the pair of straight lines $x^2 - 2xy + y^2 = 0$	45°	30°	120°	90°	4
27	PART-II (BASIC ENGINEERING)	The area of the circle with centre at (1,2) and passing through (4,6) is	5π sq. units	25π sq. units	29π sq. units	None	2
28	PART-II (BASIC ENGINEERING)	The vertex of the parabola $y^2 - 2y + 8x - 23 = 0$	(3, 1)	(1, 3)	(-1, 3)	(1, -3)	1

29	PART-II (BASIC ENGINEERING)	The equation of the hyperbola of eccentricity 3 and the distance between whose foci 24 is	$x^2 - 8y^2 = 128$	$8x^2 - y^2 = 128$	$16x^2 - y^2 = 128$	None	1
30	PART-II (BASIC ENGINEERING)	$\frac{d}{dx} \operatorname{cosech} x$	$\operatorname{cosech} x \coth x$	$-\operatorname{cosech} x \coth x$	$-\operatorname{sech} x \coth x$	$\operatorname{sech} x \coth x$	2
31	PART-II (BASIC ENGINEERING)	$\int a^x dx$	$\frac{a^x}{\log a} + c$	$a^x + c$	$\log a + c$	$\frac{\log a}{a^x} + c$	1
32	PART-II (BASIC ENGINEERING)	$\int \sin^2 x dx$	$\frac{1}{2} \left( x + \frac{1}{2} \sin 2x \right) + c$	$\frac{1}{2} \left( x - \frac{1}{2} \sin 2x \right) + c$	$\frac{1}{2} \left( x - \sin 2x \right) + c$	$\frac{1}{2} \left( x - \cos 2x \right) + c$	2
33	PART-II (BASIC ENGINEERING)	The trigonometric Fourier series of a periodic time function can have only	Cosine terms	Sine terms	Cosine & Sine terms	Cosine & DC terms	3
34	PART-II (BASIC ENGINEERING)	If the vectors $2i - 3jk$ , $3i + xj + k$ are orthogonal then $x =$	2	4	-2	1	2
35	PART-II (BASIC ENGINEERING)	The vectors having the same initial point are called	Position vector	Free vector	Co-Initial Vector	Unit Vector	3
36	PART-II (BASIC ENGINEERING)	Find the angle between two vectors $a$ and $b$ with magnitudes $\sqrt{3}$ and $2$ respectively having $a \cdot b = \sqrt{6}$	$45^\circ$	$90^\circ$	$180^\circ$	$30^\circ$	1
37	PART-II (BASIC ENGINEERING)	In complex numbers, the value of $i^{i^i} =$	37i	i	-1	-37i	2

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38	PART-II (BASIC ENGINEERING)	If $\theta$ is the angle between two lines whose slopes are $m_1$ & $m_2$ , then $\tan \theta =$ _____	$m_1 \cdot m_2$	$m_1 + m_2$	$(m_1 - m_2) / (1 + m_1 m_2)$	$(m_1 - m_2) / (1 - m_1 m_2)$	3				
39	PART-II (BASIC ENGINEERING)	Isotopes are atoms that have _____	Same atomic number but different atomic mass	Same atomic mass but different atomic	Same Number of Protons but different	None	1				
40	PART-II (BASIC ENGINEERING)	The laser produced from stimulated emission has the following characteristic _____	Monochromatic	Coherent	very narrow and collimated ray	All of the above	4				
41	PART-II (BASIC ENGINEERING)	Very small-time intervals are accurately measured by the _____	Pulsars	White dwarfs	Atomic clocks	Quartz clocks	3				
42	PART-II (BASIC ENGINEERING)	Mass and weight _____	are same quantities	Are different quantities	No relation between	All of the above	2				
43	PART-II (BASIC ENGINEERING)	These are used for bloodless surgery _____	Anesthetic	Fiber-optics	Lasers	None	3				
44	PART-II (BASIC ENGINEERING)	Sound cannot travel through _____	Gases	Vacuum	solids	Liquids	2				
45	PART-II (BASIC ENGINEERING)	Echo is heard due to _____	Refraction	Scattering	Reflection	Interference	3				
46	PART-II (BASIC ENGINEERING)	The phenomenon of bending of light at the surface of separation of two media having different R.I. is called _____	Deflection of Light	Reflection of Light	Refraction of Light	absorption of Light	3				
47	PART-II (BASIC ENGINEERING)	To convert Celsius (Centigrade) to Fahrenheit _____	multiply by 1.8 and add 32	subtract 32 and divide by 1.8	multiply by 32 and add 1.8	subtract 1.8 and divide by 32	1				
48	PART-II (BASIC ENGINEERING)	$\text{Kg m}^2$ per sec is the unit of _____	energy	Momentum	Angular Momentum	Power	3				
49	PART-II (BASIC ENGINEERING)	_____ is a dimensionless quantity	Gravity	Specific Gravity	Density	acceleration	2				
50	PART-II (BASIC ENGINEERING)	There are eight images of a candle which is kept in between two plane mirrors. The angle of inclination of the plane mirror is _____	$60^\circ$	$90^\circ$	$40^\circ$	$45^\circ$	3				
51	PART-II (BASIC ENGINEERING)	The unit used to measure the supersonic speed is _____	knots	Mach	Richter	Hertz	2				

52	PART-II (BASIC ENGINEERING)	which one of the following is not a unit of time	Micro second	Second	Year	Light year	4
53	PART-II (BASIC ENGINEERING)	In a stationary wave the distance between a node and its successive antinode is	$\lambda/2$	$\lambda/4$	$\lambda/8$	$\lambda$	2
54	PART-II (BASIC ENGINEERING)	Waves traveling through a solid medium are .....	Transverse waves	Longitudinal waves	either of the both	None	3
55	PART-II (BASIC ENGINEERING)	Electrons in atoms and molecules can change energy levels by emitting or absorbing	Protons	Photons	electrons	All of the above	2
56	PART-II (BASIC ENGINEERING)	_____ is a unit used in radio astronomy to measure the strength (flux density) of radio signals from space	Amp	Jansky	Hertz	Knot	2
57	PART-II (BASIC ENGINEERING)	Norton's Theorem results in	a Current source with an impedance in	a Voltage source with an	a Voltage source alone	a Current source alone	1
58	PART-II (BASIC ENGINEERING)	An ideal voltage source will charge an ideal capacitor	in Infinite time	Exponentially	Instantaneous	None of the above	3
59	PART-II (BASIC ENGINEERING)	A network which contain one or more than one source of emf is known as	Active Network	Passive Network	Electric Network	None of the above	1
60	PART-II (BASIC ENGINEERING)	As frequency increases, the magnetic flux inside a conductor	Increases	Decreases	Remains constant	None of the above	2
61	PART-II (BASIC ENGINEERING)	Two long parallel conductors carrying currents in opposite directions _____ each other	Attract	Repel	Noeffect on	None of the above	2
62	PART-II (BASIC ENGINEERING)	The current in capacitive circuits _____ the voltage	Lags	Leads	Inphase with	None of the above	2
63	PART-II (BASIC ENGINEERING)	The induction coil works on the principle of	Self-Induction	Mutual Induction	ampere's Rule	Flemings Right Hand	2
64	PART-II (BASIC ENGINEERING)	The relative permittibility $\mu_r$ is given by	B / $\mu_0 \cdot H$	B/H	H/B	None	1
65	PART-II (BASIC ENGINEERING)	A coil having an inductance of 150 mH is carrying a current of 5 Amp. If the current is reduced to zero in 1 mill seconds, the self-induced emf will be	125V	375V	500V	750V	4

			Resistance	Voltage	current	Power	
66	PART-II (BASIC ENGINEERING)	Reluctance in Magnetic circuits is analogous to _____ in electric circuit					1
67	PART-II (BASIC ENGINEERING)	Two capacitors of 2 $\mu\text{F}$ and 3 $\mu\text{F}$ are connected in series across 10V. The potential difference across the 2 $\mu\text{F}$ capacitor will be	4V	6V	10V	0V	2
68	PART-II (BASIC ENGINEERING)	Kirchoff's Voltage Law is known as	Conservation of Charge	Conservation Energy	Both	None	2
69	PART-II (BASIC ENGINEERING)	"The direction of an induced emf is such that it will always opposes the change that is causing" This law is called as	Kirchoffs Laws	Lenzs Law	Faradays Law	None	2
70	PART-II (BASIC ENGINEERING)	The power consumed by a pure capacitor is	1 w	0.5 W	$\infty$ W	0 w	4
71	PART-II (BASIC ENGINEERING)	when a lead acid cell is recharged	The anode becomes dark chocolate brown	Voltage rises	Energy is absorbed by the cell	All of the above	4
72	PART-II (BASIC ENGINEERING)	The Battery will get warm, when we try to send too much current through battery. This is mainly due to	Battery manufacturing defect	Due to defect of connected Load	Internal Resistance of the Battery	None	3
73	PART-II (BASIC ENGINEERING)	In a transformer, the ratio of primary to secondary is 9:4. If power input is P, what will be the ratio of power output to the power input	4:9	9:4	5:4	1:1	4
74	PART-II (BASIC ENGINEERING)	In a step-up transformer, the turn's ratio is 1:2. A Leclanche cell (emf 1.5V) is connected across the primary. The voltage across the secondary is	3.0 V	0.75 V	0 V	1.5 V	3
75	PART-II (BASIC ENGINEERING)	A semi conductor when placed at 0° K, will act as	Insulator	Conductor	Semiconduct or	Metal	1
76	PART-II (BASIC ENGINEERING)	Leakage current in the Silicon semiconductor is in the order of	Amps	milli Amps	micro Amps	nano Amps	4
77	PART-II (BASIC ENGINEERING)	In an PN junction depletion layer is created due to	Diffusion of ions	Diffusion of Minority carriers	Diffusion of Majority carriers	Diffusion of Minority & Majority	3

78	PART-II (BASIC ENGINEERING)	which of the following multi vibrator is also called as Eccles-Jordan Circuit in early days	Bistable Multivibrator	Monostable Multi vibrator	Astable Multivibrator	All of the above	1
79	PART-II (BASIC ENGINEERING)	which of the following configuration is used for Emitter follower Amplifier	Common Base	Common Emitter	Common Collector	None	3
80	PART-II (BASIC ENGINEERING)	In a class-B amplifier the output current flows for _____	90°	180°	More than 180° and	360°	2
81	PART-II (BASIC ENGINEERING)	Positive feedback is used in _____	Amplifiers	Rectifiers	Oscillators	None	3
82	PART-II (BASIC ENGINEERING)	UJT may be better used as _____	Amplifier	Clamper	Rectifier	Saw-Tooth wave	4
83	PART-II (BASIC ENGINEERING)	In a N-channel JFET, Drain current is maximum when Gate Voltage $V_{GS}$ is _____	equal to $+V_{DO}$	more than to $+V_{DO}$	equal to "0 volts"	All the above	3
84	PART-II (BASIC ENGINEERING)	The stabilization factor " $S_{BO}$ " of Fixed bias circuit is _____	$S_{BO} = (1+\beta)$	$S_{BO} = 1$	$S_{BO} = \beta$	None	1
85	PART-II (BASIC ENGINEERING)	Which of the following is true with respect to DC Amplifier ( Direct coupled amplifier)	Capable of amplifying DC signals	is designed without use of any coupling capacitors at	Poor Thermal stability	All the above	4
86	PART-II (BASIC ENGINEERING)	The loop gain of a Schmitt Trigger is always _____	0	Less than 1	Greater than 1	None	3
87	PART-II (BASIC ENGINEERING)	The most stable sine wave oscillator with most simple circuit is _____	Colpits	Armstrong	Phase-shift Circuit	Crystal	4
88	PART-II (BASIC ENGINEERING)	In a schmitt Trigger UTP=12V, LTP=8V, the hysteresis $V_H$ is _____	12V	8V	4V	20V	3
89	PART-II (BASIC ENGINEERING)	The capacitive effects of a reverse biased PN Junction are described by _____	Storage capacitance	Diffusion capacitance	Junction capacitance	All of the above	3
90	PART-II (BASIC ENGINEERING)	With reference to the early effect in Bipolar Junction Transistor (BJT), the phenomenon of Punch through occurs when _____	Collector width is brought to '0'	Base width is brought to '0'	Junction emitter width is brought to '0'	None	2
91	PART-II (BASIC ENGINEERING)	which of the following is not a characteristic of ideal Operational Amplifier	$BW = \infty$	Perfect balance $V_O = 0$ when $V_I = 0$	Gain is $-\infty$	Input resistance is Zero	4
92	PART-II (BASIC ENGINEERING)	Miller sweep has the following data $R = 1K$ ohms, $C = 1$ PF, $V = 10$ Volts. Its sweep speed is _____	$10^3$ V/S	$10^5$ V/S	$10^4$ V/S	$10^{10}$ V/S	4

93	PART-II (BASIC ENGINEERING)	Binary numbers can be converted into Hexadecimal numbers by grouping bits into group of _____ starting from _____ and represented each group as Hexadecimal number	Three bits, Right Most bit	Three bits, Left Most bit	Four bits, Right Most bit	Sixteen bits, Left Most bit	3
94	PART-II (BASIC ENGINEERING)	A string of 4 bits is called as	Bit	Byte	Word	Nibble	4
95	PART-II (BASIC ENGINEERING)	Unit distance codes are also called as	Cyclic Codes	Non Cyclic codes	Error codes	All of the above	1
96	PART-II (BASIC ENGINEERING)	The number of NAND Gates required to implement Ex-OR and Ex-NOR gates are _____ respectively	2 and 3	3 and 2	4 and 5	4 and 3	3
97	PART-II (BASIC ENGINEERING)	Logic expressions can be simplified by using _____	Boolean Algebra Method	Karnaugh - map Method	Tabulation Method	Any of the above	4
98	PART-II (BASIC ENGINEERING)	Shift left by 'n' positions in Shift Register is equivalent to _____	Multiplication by $2^n$	Addition by $2^n$	Division by $2^n$	None of the above	3
99	PART-II (BASIC ENGINEERING)	Access Time in Memories is equal to	Latency Time	Seek Time	Transfer Time	sum of all the above	4
100	PART-II (BASIC ENGINEERING)	A 'n' bit flash type ADC requires maximum of _____ to complete conversion	$2^n$ Clock pulses	$2^{n+1}$ Clock pulses	one clock pulse	$2^{n-1}$ Clock pulses	3
101	PART-II (BASIC ENGINEERING)	When the input to a seven segment decoder is "0100" the number on display will be _____	0	2	4	9	3
102	PART-II (BASIC ENGINEERING)	Race around condition occur in JK Flip Flop is due to	The clock time period is less than propagation delay	The clock time period is greater than propagation	Due to triggering	None	2
103	PART-II (BASIC ENGINEERING)	The Odd Parity is generated by	Ex-OR Gate	Ex-NOR Gate	NOT Gate	All the above	2
104	PART-II (BASIC ENGINEERING)	The Flip Flop which acts as Frequency divider is	SR Flip Flop	D Flip Flop	T Flip Flop	None	3
105	PART-II (BASIC ENGINEERING)	The number of 4:1 MUX required to make 64:1 MUX is	16	64	20	21	4

106	PART-II (BASIC ENGINEERING)	Five memory chips of 16 X 4 size have their address buses connected together. This system will be of size	16 X 16	16 X 20	20 X 16	16 X 64	2
107	PART-II (BASIC ENGINEERING)	For a 12 bit AD converter the range of input signal is 0 to +10V. The voltage corresponding to 1 LSB will be	0	0.0012V	0.0024V	0.833V	3
108	PART-II (BASIC ENGINEERING)	An equivalent decimal number of (234.55) <sub>8</sub> is	(106.703) <sub>10</sub>	(156.703) <sub>10</sub>	(146.703) <sub>10</sub>	(308.703) <sub>10</sub>	2
109	PART-II (BASIC ENGINEERING)	The 9's complement of a Decimal digit is	1's Complement of the Excess-3 code for the Digit	2's Complement of the Excess-3 code for the Digit	1's Complement of the Excess-4 code for the Digit	2's Complement of the Excess-4 code for the Digit	1
110	PART-II (BASIC ENGINEERING)	Divide by 78 counter can be realized using	6 number of mod-13 counters	13 number of mod-6 counters	13 number of mod-13 counters	one mod-13 counter followed by one mod-6	4
111	PART-III (SPECIALIZATION)	The speed of a DC motor is	Directly proportional to back emf and inversely proportional to	Inversely proportional to back emf and directly proportional	Directly proportional to emf and to flux	Inversely proportional to emf and to flux	1
112	PART-III (SPECIALIZATION)	In a DC Motor, unidirectional torque is produced with the help of	Brushes	Commutator	end plates	Both A & B	4
113	PART-III (SPECIALIZATION)	In a parallel circuit all components must	have same potential difference	have the same value	carry the same current	All the above	1
114	PART-III (SPECIALIZATION)	..... is an electrical device that converts direct current (DC) to alternating current (AC)	Rectifier	cycloconverter	Inverter	All the above	3
115	PART-III (SPECIALIZATION)	The power factor of an AC electric power system is defined as the ratio of	real power flowing to the load to the apparent power	apparent power in the circuit to the real power	real power flowing to the load to the apparent	None	1
116	PART-III (SPECIALIZATION)	Ammeters are always connected in	Series	Parallel	either	None	1
117	PART-III (SPECIALIZATION)	Transformer works on the principle of	Mutual induction	Self induction	Both	None	1

118	PART-III (SPECIALIZATION)	A 3-phase 50HZ, 6 pole squirrel cage induction motor will run at a synchronous speed of	960 rpm	1000 rpm	1500 rpm	1600 rpm	2
119	PART-III (SPECIALIZATION)	The capacitors used in single-phase motors have no	definite value	Polarity marking	voltage rating	dielectric medium	2
120	PART-III (SPECIALIZATION)	The power factor of a squirrel cage induction motor is	Low at Light loads only	Low at heavy loads only	Low at Light and Heavy	Low at rated load	1
121	PART-III (SPECIALIZATION)	when there is a variation of load resistance, Which of the following DC Generator can not deliver power at constant voltage	separately excited generator	shunt generator	series generator	compound generator	2
122	PART-III (SPECIALIZATION)	The main disadvantage with Nickel-Cadmium cells is	They have a high-energy density	They can be recharged more times than other types of rechargeable	They have to be fully discharged before recharging, because	All the above	3
123	PART-III (SPECIALIZATION)	Noise figure is used as figure of merit of	Oscillator	Amplifier	Modulator	Isolator	2
124	PART-III (SPECIALIZATION)	Armstrong modulator generates	AM Signal	FM signal	PM Signal	both B & C	2
125	PART-III (SPECIALIZATION)	Wave guides are generally made of	Gold	Bronz or aluminium	PVC	HDPE	2
126	PART-III (SPECIALIZATION)	The maximum speed at which the data can be transmitted on each channel of a standard PCM stream is	64 kbps	128 kbps	2 Mbps	4 Mbps	1
127	PART-III (SPECIALIZATION)	The IF of standard FM Receivers using the 88 to 108 MHz band is	455 KHz	26 MHz	70 MHz	10.7 MHz	4
128	PART-III (SPECIALIZATION)	When AM receiver is tuned to 1200 KHz, the Local oscillator frequency is	1200 KHz	1655 KHz	2110 KHz	745 KHz	2
129	PART-III (SPECIALIZATION)	Basic interface in ISDN refers to the transmission speed of	64 kbps	128 kbps	144 kbps	1.544 Mbps	3
130	PART-III (SPECIALIZATION)	A UART is usually an individual (or part of an) integrated circuit used for communications over a computer or peripheral device	Serial	Parallel	Both	None	1
131	PART-III (SPECIALIZATION)	_____ antenna is most frequently used as reference antenna	Yagi-Uda	Parabolic	Horn	None	3

132	PART-III (SPECIALIZATION)	A speech signal occupying the BW of 300 Hz to 3KHz, is converted into PCM format for use in digital communication. If the sampling frequency is 8 KHz and each sample is quantized into 256 levels, then the output bit rate will be	2048 Kbps	1024 Kbps	256 Kbps	64 Kbps	4
133	PART-III (SPECIALIZATION)	Spread-Spectrum multiplexing is also known as	Time division Multiplexing: 170 KHz apart	Frequency division 170 Hz apart	Code division 150 KHz apart	All the above	3
134	PART-III (SPECIALIZATION)	The FSK (with respect to HF Radio transmissions) has two tones which are generally	8.5 M bit/sec	17 M bit/sec	34 M bit/sec	68 M bit/sec	2
135	PART-III (SPECIALIZATION)	The bit rate of a digital communication system is 34 M bits/sec. The modulation scheme used is QPSK. The baud rate of the system is					
136	PART-III (SPECIALIZATION)	The standing wave ratio (SWR) equal to unity implies that	The transmission line is open circuited	The transmission line is short circuited	The transmission line characteristic impedance is Zero	The transmission line characteristic impedance is equal to Load	4
137	PART-III (SPECIALIZATION)	VSWR for an ideal Antenna is	0	$\infty$	1	Zo	3
138	PART-III (SPECIALIZATION)	is an electronic device that reduces the amplitude or power of a signal without appreciably distorting its waveform.	Amplifier	Attenuator	Mixer	All the above	2
139	PART-III (SPECIALIZATION)	The device which does not have frequency dependent properties on its own is	Inductor	Capacitor	Resistor	All the above	3
140	PART-III (SPECIALIZATION)	The typical value Zo i.e. Characteristic impedance of a Coaxial cable is	75 ohms	300 ohms	100 ohms	600 ohms	1

141	PART-III (SPECIALIZATION)	If a Transmission line is terminated with a resistance equal to its characteristic impedance	The line loss will be maximum	The input impedance will be twice the terminating impedance	The Standing Wave Ratio will be minimum	The Standing Wave Ratio will be maximum	3
142	PART-III (SPECIALIZATION)	A 75 ohm line is terminated to a load of 100 ohms, and has some incident power. Percentage of reflected power is	2%	100%	14%	20%	3
143	PART-III (SPECIALIZATION)	A transmission line has reflection coefficient "k" equal to 0.2. The VSWR is	0	0.2	0.6	1.5	4
144	PART-III (SPECIALIZATION)	Short circuited stubs are preferred to open circuited stubs because the latter are	More difficult to make	More difficult to connect	Liable to radiate	Incapable of giving a full range of reactance's	3
145	PART-III (SPECIALIZATION)	Characteristic impedance is also known as	Driving point impedance	Surge impedance	Iterative impedance	All of the above	2
146	PART-III (SPECIALIZATION)	Two terminals constitute a "Port", if they satisfy port condition. The port condition indicates	Current entering one terminal is equal to the current leaving the other	Current entering one terminal & leaving the other terminal remains unchanged	No current must enter and leave a port	All the above	1
147	PART-III (SPECIALIZATION)	A circuit with a resistor, inductor and capacitor in series is resonant of $f_0$ Hz. If all the component values are now doubled the new resonant frequency is	$2f_0$	$f_0/2$	$f_0/4$	$f_0/4$	3
148	PART-III (SPECIALIZATION)	PMMC (D'Arsonval) is used for	AC current	DC Voltage	AC Voltage	All of the above	2
149	PART-III (SPECIALIZATION)	The bridge which is used to measure values of resistance below 1 ohm is	Wheatstone bridge	Keivin's Bridge	Maxwell's bridge	Hay's bridge	2
150	PART-III (SPECIALIZATION)	The delay line in CRO is placed after	Horizontal Amplifier	Vertical Amplifier	Trigger circuit	Power supply	2
151	PART-III (SPECIALIZATION)	An accurate voltmeter must have an internal impedance of	Very Low value	Low value	Very High Value	Zero	3
152	PART-III (SPECIALIZATION)	The term ampere-hour(Ah) is associated with	rectifiers	Transformers	Electromagnets	Storage cells	4

153	PART-III (SPECIALIZATION)	A connecting probe in CRO causes	loading	distortion in the wave	both	None	4
154	PART-III (SPECIALIZATION)	CT and PT are used generally to	Step up the respective quantities	step down the respective quantities	Both	None	2
155	PART-III (SPECIALIZATION)	when the DC voltmeter is connected polarities reversed	The pointer deflects upscale	The pointer deflects	The pointer remains	None	2
156	PART-III (SPECIALIZATION)	An Analog transducer has range 0 - 10V. Calculate bits of an A/D converter if the resolution is 5 mV	10	9	11	None	3
157	PART-III (SPECIALIZATION)	The effect used in Poyinting Vector Wattmeters, for their operation is	Heating effect	Induction effect	Hall effect	None	3
158	PART-III (SPECIALIZATION)	When two frequencies $F_1$ & $F_2$ are applied to the Horizontal & Vertical Amplifiers respectively of a CRO, a "circle" is appeared on the CRT/ CRO screen. With reference to the Lissajous figures, the ratio of frequencies $F_1$ & $F_2$ is	2:1	1:2	1:1	3:1	3
159	PART-III (SPECIALIZATION)	An Amber LED on Logic probe indicates	High state	Low state	Pulse	None	3
160	PART-III (SPECIALIZATION)	Signature analysers are able to detect	digital waveform patterns	digital Logic patterns	digital Logic state	None	1
161	PART-III (SPECIALIZATION)	Nyquist stability test is a graphical method and its advantages are	Applicable to experimental results or frequency response of open loop	closed loop stability can be predicted from openloop results	It indicates how to stabilize an unstable system	All the above	4
162	PART-III (SPECIALIZATION)	In a feedback system, output is a function of	Output and input	input and feedback	Reference and output	None	2
163	PART-III (SPECIALIZATION)	The Routh-Hurwitz criteria is comprised of separate tests that must be satisfied for a stable system	1	2	3	4	3
164	PART-III (SPECIALIZATION)	In a critically damped system, the damping factor of the system is	Zero	Less than unity	Unity	greater than unity	3

165	PART-III (SPECIALIZATION)	Any physical system which does not automatically correct for variation in its output is called	Closed Loop System	Open Loop System	Unstable system	Stable system	2
166	PART-III (SPECIALIZATION)	In discrete time _____ is used to obtain transfer function	Laplace Transform	Z-Transform	Both	None	2
167	PART-III (SPECIALIZATION)	For a stable system, the roots of the characteristic equation must lie on	Real Axis only	Imaginary axis only	Left Half plane	Right Half plane	3
168	PART-III (SPECIALIZATION)	The margin between actual gain and critical gain is a measure of	Relative stability	absolute stability	sensitivity	Gain Margin	4
169	PART-III (SPECIALIZATION)	In continuous time _____ is used to obtain transfer function	Laplace Transform	Z-Transform	Both	None	1
170	PART-III (SPECIALIZATION)	when a unit step input is applied to a perfect integrator, the output will be _____	bounded	unbounded	remains constant	is unity	2
171	PART-III (SPECIALIZATION)	In a Nyquist criteria, the roots of characteristic equation are given by	Poles of the open loop transfer function	Zeros of the open loop transfer function	Poles of the Closed loop transfer function	Zeros of the closed loop transfer function	1
172	PART-III (SPECIALIZATION)	Signal flow graph is used to obtain the	stability of the system	Transfer function of Polynomial	Controllability of the system	observability of the system	2
173	PART-III (SPECIALIZATION)	while calculating our Routh-Hurwitz, if we have a row of all zeros, the row directly above it is known as the	Auxiliary Polynomial	Polynomial	Transfer function	None	1
174	PART-III (SPECIALIZATION)	which of the following is not performed by a microprocessor	Controlling the timing of a information flow	Performing the computing tasks	Communicating with all peripherals using	storing results in registers	1
175	PART-III (SPECIALIZATION)	The _____ flag is set (to 1) if there is a carry from the low nibble (lowest four bits) to the high nibble (upper four bits), or a borrow from the high nibble	Carry Flag	Auxiliary carry Flag	Sign Flag	Parity flag	2
176	PART-III (SPECIALIZATION)	Which of the following is disadvantage of parallel data transmission	Speed is low	Data cannot flow in both directions	cost of providing many registers, 8000 <sub>H</sub>	All the above	3
177	PART-III (SPECIALIZATION)	After reset, CPU begins execution of instruction from which memory address	0000 <sub>H</sub>	0001 <sub>H</sub>	8000 <sub>H</sub>	FFFF <sub>H</sub>	1



190	PART-III (SPECIALIZATION)	The type of computers which can execute millions of instructions and billions of data per second	Laptop	Mini Computer	MainFrame computer	Personal Computer	3
191	PART-III (SPECIALIZATION)	ORACLE is	an Operating system	a RDBMS	an Interpreter	A Compiler	2
192	PART-III (SPECIALIZATION)	How many OSI Layers are covered in X.25 standard	2	3	5	7	2
193	PART-III (SPECIALIZATION)	Repeaters function in the _____ layer	Physical	DataLink	Network	Session	1
194	PART-III (SPECIALIZATION)	One of the following is a direct entry input devices	Key-to- diskette	Punched card	Computer terminal	Mouse	4
195	PART-III (SPECIALIZATION)	When a computer is first turned on or restarted a special type of absolute loader is executed called a	'Compile and Go' Loader	PreBoot Loader	Relating Loader	Bootstrap Loader	4
196	PART-III (SPECIALIZATION)	Introduction of parity bit for error detection does not imply	Increase in the lengths of the	increase in the hardware	automatic error	all the above	3
197	PART-III (SPECIALIZATION)	Compiler converts	Source code to Higher Language	Object code to source code	Source code to Machine code	One source code to another	3
198	PART-III (SPECIALIZATION)	Typed matter/document is to be saved in _____	Folder	File	HardDisk	CD-ROM	2
199	PART-III (SPECIALIZATION)	Moving processes from main memory to disk is called	Scheduling	Catching	Swapping	Spooling	3
200	PART-III (SPECIALIZATION)	What function enable a user to input information ( in C language) while the programme is in execution	Print f	scan f	&&	strcpy	2