TEST-3 (DIGITAL ELECTRONICS)-(EECTRONIC)

Q.1	The flip-flip circuit is			c) Lead cascade demonstrator			
	a) Unstable	b) multistable		d) Linear digital dem	onstrator		
	c) Monostable	d) bitable					
			Q.9	LED display represen	its.		
Q.2	A digital counter consists of a group of			a) Loop emitter deco	oder		
	a) Flip-flop			b) Long emission die			
	b) half adders			c) Light emitting dioc			
	c) Full adders			d) Logic electrostation			
	d) None of the above			, , ,			
	2, 2 2.2.2		Q.10	For LCD display which of the following liquid			
Q.3	RAM memory representsmemory.			crystals is used?			
۷.5	a) Record- attenuated			a) Aqua regia b) Nemanic fluid			
	b) Read- audio	_		c Liquid boron	d) Mercury		
	c) Radio-amplifies			o =:qu.u. so. o	ω,ο. σω. γ		
	d) Random-access			needs D.C. forward voltage to emit			
	a, nanaom access		Q.11	light.	or war a voicage to enme		
Q.4	ROM memory repres	entsmemory		a) LCD	b) LED		
Ψ	a) Read-out	b) Record- oscillation		c) both a and b	d) None of the above		
	c) Register open	d) Read- octave		c) both a and b	a, none or the above		
	o, register open	a) Nead Octave	Q.12	A digital voltmeter	has Input and		
Q.5	A temporary memory	v is destroyed	4.11	Output	masili inpat and		
۷.5	a) When power is switched off			a) Digital, digital	b) digital, analog		
	b) In few milliseconds			c) Analog, analog	d) analog, digital		
	c) In few seconds		c) / iiiaiog) aiiaiog	a, anarog, argicar			
	d) In few minutes		Q.13	Display consu	umer least amount of		
	u,		٦٥	power.			
Q.6	is a permaner	nt memory.		a) LED			
٠.٠	a) ROM only			b) LCD			
	b) RAM only			c) Fluorescent display			
	c) Both 'a' and 'b'			d) All displays consur	•		
	d) Either 'a' and 'b'			a, maisplays consul	mes same power		
	d) Eleller a ara b		Q.14	Which of the follow	ring memories has both		
Q.7	is a volatile m	emory	α. τ	read and write capal	_		
	a) ROM b) RAM c) Either 'a' and 'b'			a) ROM only			
				b) RAM only			
				c) Both 'a' and 'b'			
	d) Both 'a' and 'b'			d) None of the above	د		
	a, both a and b			a) None of the above	-		
Q.8	LCD display represen	ts	Q.15	A 4-bit counter with	four flip-flops will cont		
٦.٥	a) Light decoding device			up to decimal.			
	b) Liquid crystal display			a) 8	b) 15		
	a, Elquia di yotal diopi	- 1		<i>-,</i> -	~, ==		

	c) 31	d) 63		d) Equal to the number of bits required in the final binary count			equired in	
Q.16	PROM stands for. a) Positive read only b) Permanent read or		Q.24	·) equals		
	c) Polarized read only d) Programmable rea	y memory		c) A		d) A A		
Q.17	In a RS flip-flop no ch		Q.25	Octal coding i a) 3's	Octal coding involves grouping the bits a) 3's b) 4's			bits in
Q.17	a) Set mode	b) reset mode		c) 5's		d) 7's		
	c) Disabled mode	d) prohibited mode	Q.26	The binary div	vision 11		100 ₂ g	ives
Q.18	Compounds offor LED.	are generally used		a) 11 c) 110		b) 101 d) 110	0	
	a) Sulphur c) Phosphorus	b) silica d) gallium	Q.27	The number 1	178 is ea	uivalen	t to b	inarv
Q.19		, -	-	a) 111 c) 1111		b) 111(d) 100	0	. ,
Q.13	family of logic circuits uses field effect transistors.					•		
	a) CMOS b) TTL		Q.28	The output of a 2-input OR gate is zero only when its				
	c) Both 'a' and 'b'd) None of the above			a) Either inpuc) Both inputs		b) eith d) both	•	ut is 1 ts are 1
Q.20	Power is drawn by a	CMOS circuit only when	Q.29	Which of the following 4-bit comb		mbinations		
Ψ.=0	a) in static state		4.20	(s) is/are inva		BCD c	ode?	
	b) its output is heightc) its output is low			a) 0010 c) 1000		b) 010: d) 101		
	d) its switches logic le	evels	Q.30	The number 100101 ₂ is equal to octal			ctal	
Q.21		ktensively used for one-		a) 25 c) 45	2	b) 37 d) 54		
	chip computers mainly because of their extremely			•	_	•		_
	a) high noise immunityb) low power dissipation		Q.31	A unique ad logic family is	_	ous fea	ature	of CMOS
	c) low cost d) large parching den	sity		a) Speed b) Use of NM	OS circui	its		
0.00				c) Dependenc	ce on fre	quency		
Q.22	multivibrator can be used as a clock timer.			d) Power dissipation is nanowatt range			ange	
	a) Astable b) Bistable		Q.32	The two outputs of RS flip-flop are a) Always high				
	c) Either of the above	2		b) Always low	/			
	d) None of these			c) Either low of d) Always con	_	itary		
0.32					•	•		
Q.23	In a digital counter t	the number of flip-flops	Q.33	An A/D co		•		reference

a) a flip- flop

c) Always 2

	b) a saw tooth generator c) d.c. voltage		Q.43	A Schottky diode has minority carriers and Voltage drops in forward			
	d) set of keys			direction.			
				a) no, very lowb) no	_		
Q.34		e used to change analog		c) large number of, very high			
	voltage to binary dat			d) large number of,	very low		
	a) A/D c) Both a & b	b) D/A d) None of the above	Q.44	For 2 out f 5 codo	which of the following		
	c) both a & b	u) None of the above	Q.44	statements is correct			
Q.35	The number of full adders in a 4-bit parallel			a) It has even parity			
	adder will be	and the parameter		b) It is an unweighte			
	a) tow	b) three			1's in each code group		
	c) four	d) six		d) All of the above			
Q.36	Which of the following binary additions is		Q.45	An ASCII input/output code is Bit code			
	incorrect?			a) Two	b) four		
	a) 1 + 1 = 0	b) 0 + 1 = 1		c) Seven	d) eight		
	c) $0 + 0 = 0$	d) 1 + 0 = 1	0.46	Flin flon io vo	ad aa latab		
Q.37	Is synchronous.		Q.46	Flip-flop is use a) T	ed as fatch. b) D		
Q.37	a) Full adder			c) JK	d) RS		
	b) Half adder			c) six	a) No		
	c) Clocked R-S flip-flo	op qu	Q.47	Which of the follo	owing codes is used to		
	d) R-S flip-flop				e to ambiguity in reading		
				of a binary optical e	ncoder?		
Q.38	A D-flip-flop is F	Flip-flop.		a) Noise margin	b) Bandwidth		
	a) Digital	b) delayed		c) Gate dissipation	d) Propagation delay		
	c) Dial type	d) differential					
0.20	· · · · · · · · · · · · · · · · · ·		Q.48	A gate in which all	1.) 0		
Q.39	The output of basic DTL configurations is a) high when all inputs are low			a) BCD code	b) Gray code		
	, •			c) Octal code	d) Excess-3 code		
	b) high when all inputs are highc) low when all inputs are high		Q.49	A gate in which all inputs must be low to get			
	d) low when one of t		a high output		_		
		no ne ne ne ne ne		a) An AND gate	b) A NAND gate		
Q.40	In Schottky TTL, a	Schottky diode is used		c) An inverter	•		
	primarily to				-		
	a) act as a switch		Q.50	This of the follo	wing is the simplified		
	b) act as a controlling switch			versions of the Boolean expression AB + A B			
	c) prevent saturation of the transistor			C + (A+B+C)?			
	d) saturate the trans	istor		a) A B + B C	b) A B + B C		
0.44	Maria C. 1. C. 11			c) AB+ BC	d) A B + B C		
Q.41		ng has a binary input?	0.50		. of all functions of the		
	a) D/A converter	b) A/D converterd) None of the above	Q.50	· · · · · · · · · · · · · · · · · · ·	n of all functions of the		
	c) Both a & b	uj None of the above		basic logic functions a) NOT	o, it suffices to flave		
Q.42	Typical switching tim	e for FCL is		b) ANDNOT			
<u>=</u>	a) 5 seconds	b) 5 milliseconds		c) OR			
	-	-		-			

d) None of the above

c) 5 microseconds

d) 5 nanoseconds

Q.51	The memory elem memory consists of a) Doped aluminum b) Plated wires	mory consists of Doped aluminum		b) DTL c) TTL d) None of the above		
	c) nickel Iron alloy d) Superconductive n	material	Q.60	converter	ised as parallel to-series	
Q.52	To solve differential which of the followin	equations numerically generated and six used?		a) Multiplexer c) Decoder	b) Digital counter d) De- multiplexer	
	a) Newton-Raphson method b) Gauss-elimination method c) Runga-Kutta method		Q.61	A half adder has which of the following? a) Two inputs and two outputs b) Three inputs and two outputs		
0.53	d) Any of the above	hio and information		c) Two inputs and one output d) One input and one output		
Q,53	 Is used for storinga) A latchb) A flip-flop	b) A register d) All of the above	Q.62	a) D	not have race problem. b) T	
Q.54	BCD expresses each (a) a byte	decimal digit as b) a string of bits	Q.63	c) JK A ring counter is sam	d) Master-slave	
	c) a string of 4 bits	d) a string of 2 bits		a) A NAND gate c) A NOR gate	b) An AND gate d) An inverter	
Q.55	The output states in sequential circuits are functions of a) present and past input			The Schmitt trigger, for a sinusoidal input, gives output as		
	b) presents input states c) past input states d) none of the above	tes		a) Sinusoidal itself c) Saw tooth	b) square wave d) None of the above	
Q.56		a binary adder is used as BCD adder,		error can be use check.	ually deleted by a parity	
	the sum is correct what a) Less than 9 b) great c) less than 16			a) One-bit c) Three-bit	b) Double-bit d) Any-bit	
	d) none of the above		Q.66	BCD number are obta a) Converting binary	•	
Q.57	During instructions execution read cycle is always followed by			b) Each decimal digit is represented four bit binaryc) Converting decimal number to binary		
	a) delete signal c) write cycle	b) read cycle d) none of the above		d) Converting decima	-	
Q.58	Schmitt trigger can b a) Flip-flop b) Comparator		Q.67	A BYTE stands for a s a) Two c) Eight	tring of BITS. b) four d) twelve	
	c) Square—wave generatord) all of the above		Q.68	is an unweighta) 63210	ted code b) 2421	
Q.59	For digital ICs the mo	ost widely used 'Bipolar		c) 8421	d) Excess-3code	
	a) ECL		Q.69	Semiconductor mem	ories are	

- a) non-volatile, small size'
- b) Volatile, small size
- c) volatile
- d) Non-volatile
- Q.70 Due to which of the following reasons a NAND gate is called a universal logic element/
 - a) Many digital computers use NAND gates
 - b) All the minimizing techniques are applicable for optimum NAND gate realization
 - c) Any logic function can be realized by NAND gate alone
 - d) All of the above
- Q.71 K- map method of simplification can only be applied when the given functions is in
 - a) Canonical form
 - b) Product of sum form
 - c) Sum of product form
 - d) Any of the above form
- Q.72 In which of the following the power dissipation is the lowest?
 - a) ECL
- b) MOS
- c) TTL
- d) None of the above
- Q.73 Which of the following are the most widely used universal gates?
 - a) NAND and OR gates
 - b) NOR and AND gates
 - c) OR and AND gates
 - d) NOR and NAND gates
- Q.74 As compared to analog computers, digital computers are more widely used because they are
 - a) Easier to maintain
 - b) Useful over wider ranges of problem types
 - c) Less expensive
 - d) Always more accurate & faster
- Q.75 In a full adder, there are
 - a) Three binary digit inputs and three binary digit output
 - b) Three binary digit inputs and binary outputs

- c) two binary number inputs and two outputs
- d) none of the above
- Q.76 Generally....... flip-flops are used in shift registers.
 - a) D

b) T

c) SR

- d) JK
- Q.77 In octal system the value of 2⁵ is
 - a) 20
- b) 40
- b) 200
- d) 400
- Q.78 Which of the following circuits exhibits memory?
 - a) Ex. OR gate
 - b) NAND gate
 - c) Astable multivibrator
 - d) Bistable multivibrator
- Q.79 A simple flip-flop is a Bit storage cell.
 - a) One
- b) tow
- c) Three
- d) four
- Q.80 An AND gate is a circuit.
 - a) Relaxation
- b) memory
- c) Sequential
- d) combinational