

SECOND YEAR HIGHER SECONDARY EXAMINATION MARCH 2018

SUBJECT: Electronics Service Technology CODE. NO: 9024.

Qn No	Sub Qns	Answer Key/Value Points	Score	Total
1		5 Flip Flops	1	5
2		Low pass filter	1	
3		7MHz	1	
4		10V	1	
5		Total internal reflection	1	
6		$A(A+B) = A \cdot A + A \cdot B$ $= A + A \cdot B$ $= A(1+B)$ $= A \cdot 1$ $= \underline{\underline{A}}$	2	2
7	a	High Pass filter	1	2
	b.		1	
8		CMRR is the ratio of differential mode gain to common mode gain	2	2
9			1+1	2

Qn No	Sub Qns	Answer Key/Value Points	Score	Total
10			2	2
11		Structure of Yagi Uda antenna	2	2
12		Circuit diagram of ring counter with 4 flip-flops	2	2
13		Basic block diagram of RADAR	2	2
14		EX-OR gate using NAND gate	3	3
15	a	-ve clipper with +ve biasing	1	3
	b	O/P waveform	2	
16	a	$V_o \propto \int V_{in} dt$	1	3
	b	Circuit diagram of integrator using Op-amp	2	
17		Block diagram of TV transmitter	3	3
18		Brief explanation of each [wow and flutter, hissing, rumble]	1 each	3
19		Explanation of race around condition	2	4
		Elimination method - (i) Use of master slave JK FF (ii) using edge triggered clock	2	
20		Block diagram of electronic exchange	4	4

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21		Block diagram of on line UPS Explanation	3 1	4
22		Circuit diagram of monostable multivibrator	4	4
23		Vestigial Side band spectrum Representation of frequencies (any 3)	1 3	4
24	a	NAND & NOR	$\frac{1}{2} \times 2 = 1$	5
	b	K map entry Grouping Equation	2 1 1	
25	a	Circuit diagram of astable multi-vibrator using 555 IC	3	
	b	IC fabrication	2	5
26	a	Block diagram of fax transceiver	3	5
	b	Frequency reuse	2	
27	a	Electromagnetic induction	1	5
	b	Diagram of moving coil loud-speaker	3	
		Explanation	1	

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