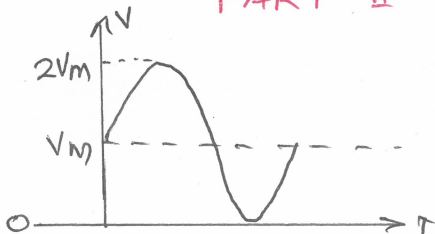


ANSWER KEYSECOND YEAR HIGHER SECONDARY EXAMINATION MARCH 2022

PART-I/II/III

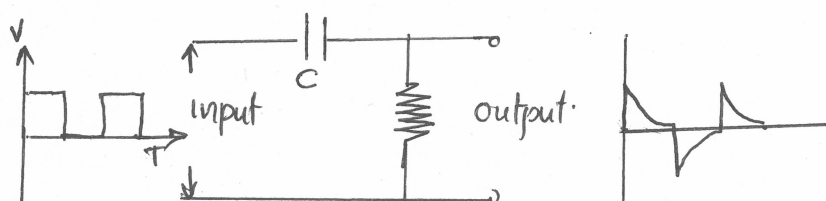
SUBJECT: ELECTRONIC SYSTEMCODE NO: ~~SY553~~ 8753VERSION: Q60 SCORES2 HOURS

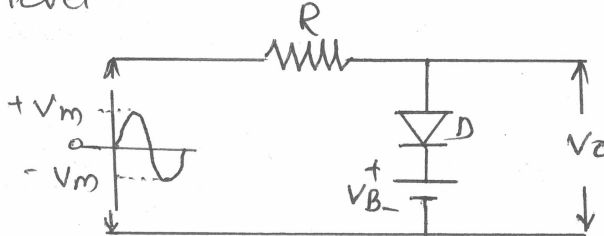
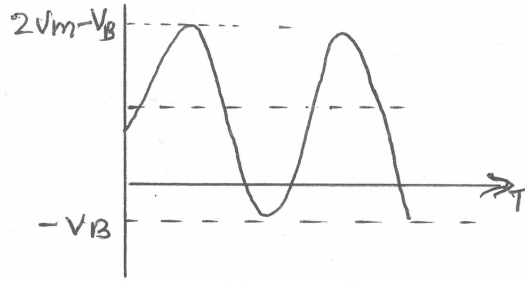
Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
PART I				
A 1		Low Pass Filter	1	9x1 =9
2		CE Amplifier	1	
3		360°	1	
4		Sine	1	
5		Etching	1	
6		Saturation and cutoff	1	
7		one	1	
8		Critical angle	1	
9		8085	1	
B 10		$\frac{1}{2\pi RC}$	1	
11		Hartley Oscillator	1	
12		Large Scale Integration	1	
13		Therapeutic Equipment	1	
A 14		PART II 	2	

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score																							
15		CMRR Definition	2	4x2 = 8																							
16		<table border="1"><thead><tr><th colspan="2">INPUT</th><th colspan="2">OUTPUT</th></tr><tr><th>S</th><th>R</th><th>Q</th><th>$\bar{Q}$</th></tr></thead><tbody><tr><td>0</td><td>0</td><td colspan="2">No change</td></tr><tr><td>0</td><td>1</td><td>0</td><td>1</td></tr><tr><td>1</td><td>0</td><td>1</td><td>0</td></tr><tr><td>1</td><td>1</td><td colspan="2">Invalid.</td></tr></tbody></table>	INPUT		OUTPUT		S	R	Q	$\bar{Q}$	0	0	No change		0	1	0	1	1	0	1	0	1	1	Invalid.		2
INPUT		OUTPUT																									
S	R	Q	$\bar{Q}$																								
0	0	No change																									
0	1	0	1																								
1	0	1	0																								
1	1	Invalid.																									
17		Global system for Mobile Communication Short notes	2																								
18		circuit diagram	2	3x2 = 6																							
19		Serial-in Serial-out (SISO) Serial-in Parallel out (SIPO) Parallel-in Serial-out (PISO) Parallel-in Parallel-out (PIPO)	2																								
20		optical fiber whose core has a refractive index that decreases with increasing radial distance from the optical axis of the fiber	2																								
21		PART III circuit diagram working	$\left. \begin{matrix} 1.5 \\ 1.5 \end{matrix} \right\} 3$	4x3 = 12																							
22		crystal growth epitaxial growth oxidation diffusion.	3																								
23	a	Radio Detection and Ranging	$\left. \begin{matrix} 1 \\ 2 \end{matrix} \right\} 3$																								
24	b)	Simple block diagram Any three Advantages.	3.																								

B

A

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
25	a	Circuit diagram of voltage follower using OP-AMP.	$\left. \begin{matrix} 2 \\ 1 \end{matrix} \right\} 3$	$3 \times 3 = 9$
	b	Any one application of voltage follower		
26		Any three points (type of signal handling, type of display, Noise, size etc)	3	
27		Brief description, application, advantages etc	3	
PART IV				
28		Circuit diagram of Astable M.V. using IC-555 Working	$\left. \begin{matrix} 2 \\ 2 \end{matrix} \right\} 4$	$4 \times 4 = 16$
29	a)	Smps Block diagram.	$\left. \begin{matrix} 3 \\ 1 \end{matrix} \right\} 4$	
	b)	Any one application		
30	a)	Circuit diagram of 4:1 Multiplexer.	$\left. \begin{matrix} 2.5 \\ 1.5 \end{matrix} \right\} 4$	
	b)	Truth table		
31		Block diagram of ECG Machine	4	
32	a		$\left. \begin{matrix} 3 \\ 1 \end{matrix} \right\} 4$	$2 \times 4 = 8$
	b)	any one advantage like high gain, high input impedance etc.		
33		Circuit diagram using flip-flop Working	$\left. \begin{matrix} 2 \\ 2 \end{matrix} \right\} 4$	

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
A 34	a	PART V. circuit used to remove or clip off the part of a signal that is above or between some defined reference level.	1	3x6 = 18
	b)		3	
	c)		2	
35	a	Block diagram of JK master slave flip-flop Truth table of JK master slave flip flop	3 1	6
	b)	Any two Comparisons of asynchronous and synchronous counter	2	
36	a)	Block diagram of public address system working	1.5 1.5	3x6 = 18
	b	Constructional details (diagram or explanation)	3	