

ANSWER KEY

SECOND YEAR HIGHER SECONDARY EXAMINATION MARCH 2022

PART-I/II/III

SUBJECT: ELECTRONIC SYSTEM

CODE NO: ~~SY553~~ 8753

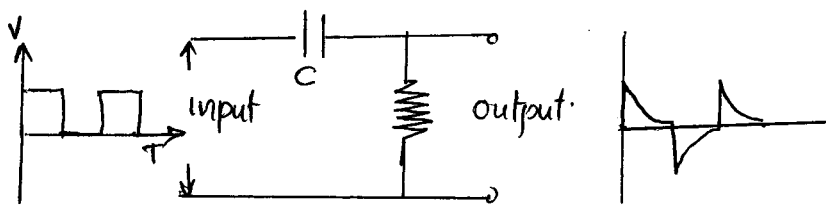
VERSION: Q

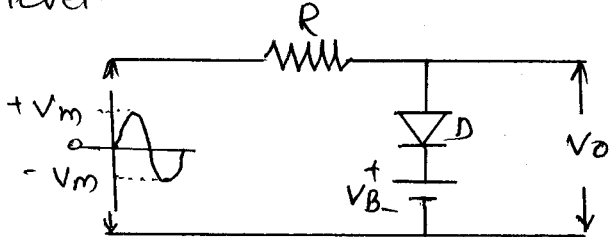
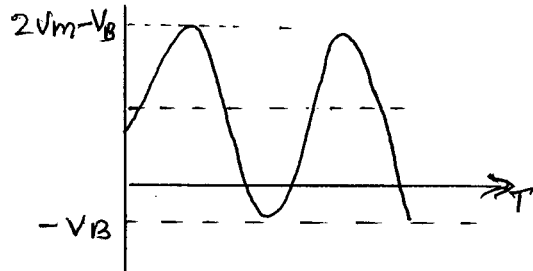
60 SCORES

2 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																									
16		<table border="1" style="margin-left: auto; margin-right: auto;"> <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	4x2 = 8
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																									
B	18	circuit diagram	2																									
	19	Serial-in Serial-out (SISO) Serial-in Parallel out (SIPO) Parallel-in Serial-out (PISO) Parallel-in Parallel-out (PIPO)	2	3x2 = 6																								
	20	optical fiber whose core has a refractive index that decreases with increasing radial distance from the optical axis of the fiber	2																									
A	21	PART III circuit diagram working	1.5 } 1.5 } 3																									
	22	crystal growth epitaxial growth oxidation diffusion.	3	4x3 = 12																								
	23	a) Radio Detection and Ranging b) Simple block diagram	1 } 2 } 3																									
	24	Any three Advantages.	3.																									

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
B	25	a) Circuit diagram of voltage follower using OP-AMP.	2 } 3 1 }	3x3 = 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				
A	28	Circuit diagram of Astable M.V. using IC-555 Working	2 } 4 2 }	4x4 = 16
29	a)	Smps Block diagram	3 } 4 1 }	
	b)	Any one application		
30	a)	Circuit diagram of 4:1 Multiplexer	2.5 } 4 1.5 }	
	b)	Truth table		
31		Block diagram of ECG Machine	4	
B	32	a) 	3 } 4 1 }	2x4 = 8
	b)	any one advantage like high gain, high input impedance etc.		
33		Circuit diagram using flip-flop Working	2 } 4 2 }	

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