SECOND YEAR HIGHER SECONDARY EXAMINATION MARCH 2019

SUBJECT : ELECTRONICS

CODE. NO: SY 31

Qn No	Sub Qns	Answer Key/Value Points	Score	Total
1		Three	1	1
2		Diode	1	1
3		Zero	1	1
4		One	1	1
5		FSK	1	1
6		Graded index fiber	1	1
7		625 lines	1	1
8		Dynamic RAM	1	1
9		Modem	1	1
10		24 OR 21	1	1
11		Circuit diagram	1	2
		Wafeform	1	
12		Power of sidebands = 120-100 = 20 W	2	2
		Power of one sideband = $\frac{20}{2}$ = 10W		

Qn. No.	Sub Qns	Answer key / Value points	Score	Total
13		Ability to reflect high frequency radio waves.	2	2
14		The waves reaching the receiver travelling different paths may be in out of phase and may reduce the effective strength of the signal	2	2
15		advantage – Signal quality will improve	1	2
		disadvantage - Amount of data will become large	1	
16		Draw the FSK signal	1	2
		Two	1	
17		Interpreter executes a program line by line	1	2
		Compiler executes the whole program in a single step	1	
18		macro cell micro cell Pico cell	2	2

Qn No.	Sub Qns.	Answer key / Value points	Score	Total
19		Circuit diagram	3	3
20		Any three advantages	1×3	3
21		Write total internal reflection	1	3
		The index of the cladding is made larger compared to that of the core	2	
22		Index of the core varies continuously	1½	3
		It reduces pulse dispersion	1½	
23		Explain Interlaced scanning	3	3
24		25 frames / sec and 625 lines / frame	3	3
		So $T = \frac{1}{25 \times 625} = 64\mu sec$		
25		One point on each	1×3	3
26		Write the concept of frequency reuse	3	3

Qn No	Sub Qns.	Answer key / Value Points	Score	Total
27		Circuit diagram	2	4
		Explanation	2	
28	a	Circuit	2	4
	b	Output waveform	2	
29	a	Circuit	2	4
	b	Explanation	2	
30		Measure V_{max} and V_{min}		
		$m = \frac{V_{max} - V_{min}}{V_{max} + V_{min}}$	4	4
31		Write any four advantages	1×4	4
32	a	To send many data through a single channel	1	4
	b	Explain TDMA, FDMA and CDMA	1×3=3	