

SECOND

YEAR HIGHER SECONDARY EXAMINATION MARCH 2018

SUBJECT: ELECTRONICS

CODE. NO: 9023

Qn No	Sub Qns	Answer Key/Value Points	Score	Total
1		Load Regulation	1	1
2		Clamping Circuit OR clamper	1	1
3		Multiplexes	1	1
4		Intermediate Frequency OR IF	1	1
5		Sampling	1	1
6		Total Internal Reflection OR TIR	1	1
7		Hue	1	1
8		Primary Memory OR Main memory	1	1
9		IP Address OR Internet Protocol Address	1	1
10		Code Division Multiple Access OR CDMA OR FDMA	1	1
11		Circuit diagram	1	2
		Frequency response	1	

Qn No	Sub Qns	Answer Key/Value Points	Score	Total
12		Explain the effect of image freq. on signal reception.	2	2
13		Critical freq. explanation	1	2
		Maximum Usable freq. explanation	1	
14		Diagram	1	2
		Differences	1	
15		Block diagram of PCM	2	2
16		BFSK - Only two frequencies are used to represent data.	1	2
		M-ary FSK - 2^n different freq. are used to send 'n' bits at a time. This called M-ary FSK where $M = 2^n$	1	
17		Any two properties of impact printer	1	2
		Any two properties of non-impact printer	1	
18		1. Passive Hub: The received signal is forwarded as it is	1	2
		2. Active Hub: The received signal is amplified and forwarded. This requires power supply	1	

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19.		Circuit diagram of 1:4 Demultiplexer OR Circuit diagram of 4:1 Multiplexer	3	3
20		Block diagram Explanation	2 1	3
21		Explanation	3	3
22		Orbital velocity $v = \sqrt{gr}$ OR $v^2 = gr$ Orbital period $T = \frac{2\pi r}{v}$	1½ 1½	3
23		1. Luminance - Amount of light Intensity 2. Hue - a) Predominant spectral colour 3. Saturation - b) Spectral purity of the colour	1 1 1	3
24		Parabolic reflector Feeder cables Feed antenna	1 1 1	3
25		Any three points on cables	3	3
26		Explanation of GSM	3	3

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27.	a	Diagram	1	4
		Explanation	1	
	b	Diagram	1	
		Explanation	1	
28	a	Diagram	1	4
		graph	1	
	b	Diagram	1	
		graph	1	
29	a	4 types	1	4
	b	Diagram	2	
		Explanation	1	
30		Any four types of AM transmission	4	4
31		Any four network communication devices	4	4
32	a	By forming cell cluster	1	4
	b	Diagram	2	
	c	Macro, Micro, Pico definitions	1	

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