

Government of Karnataka
 Karnataka School Examination and Assessment Board (KSEAB)
 Blueprint for Model Question Paper – 2

Subject: II PUC Electronics (40)

Academic Year: 2024-25

	Chapters	Hour	Marks	Remember (35%)				Understand (35%)					Apply (20%)					HOTS
				MCQ	SA	LA	LA	MCQ	FIB	SA	LA	LA	MCQ	SA	LA	LA		
				1M	2M	3M	5M	1M	1M	2M	3M	5M	1M	2M	3M	5M		
1	Field Effect Transistor (FET)	04	04	1								1						
2	Transistor Biasing	03	03		1				1									
3	Transistor Amplifiers	14	12	1						1*			1E				1N	
4	Feedback in Amplifiers	06	06			1		1						1N				
5	Operational Amplifiers	15	13	1				1E	1	1*							1N	
6	Oscillators	08	07	1					1*		1			1N				
7	Wireless Communication	04	04			1		1										
8	Modulation and Demodulation	15	12	1		1				1*	1						1N	
9	Power Electronics and its applications	08	06	1							1				1N			
10	Digital Electronics	18	18	1	1			1E		1*			1		1N	1N		
11	Microcontroller	10	08	1	1								1E					
12	C Programming	09	06	1									1E					
13	Modern Communication Systems	06	06				1		1		1							
Total		120	105	9	6	12	10	5	5*	06	06	15	01	04	06	10	10	
				37				37					21				10	

* – Fill in the blank,

HOTS – Higher order thinking,

E –Essay type Question,

N-Numerical Problems

<p style="text-align: center;">Question Paper Pattern</p> <p style="text-align: center;">Subject: II PUC Electronics (40)</p>			
Parts	Marks per Question	Total Questions given including choices	Questions to be answered
Part A – I (MCQ)	1	$15Q \times 1M = 15$	$15Q \times 1M = 15$
Part A – II (Fill in the Blanks)	1	$5Q \times 1M = 05$	$5Q \times 1M = 05$
Part B - III	2	$8Q \times 2M = 16$	$5Q \times 2M = 10$
Part C - IV	3	$8Q \times 3M = 24$	$5Q \times 3M = 15$
Part D - V Section I (Essay Type)	5	$5Q \times 5M = 25$	$3Q \times 5M = 15$
Part D - VI Section II (Numerical)	5	$4Q \times 5M = 20$	$2Q \times 5M = 10$
		105	70

Guidelines to question paper setters

Q No. 27 Short answer from microcontroller (meanings of mnemonics to be avoided).

Q No. 34 Numerical on HWR or FWR for the given rms voltage.

Q No. 35 Numerical (excluding POS).

Q No. 37 Working of any one amplifier circuit.

Q No. 38 Derivation on any one op-amp circuit.

Q No. 40 ALP program (from the specified programs in the syllabus).

Q No. 41 C program (from the specified programs in the syllabus).

Q No. 42 Numerical on transistor r_e' model (only silicon transistor).

Mention $V_{BE} = 0.7$ V and $r_e' = 26mV/I_E$ in the problem.

Q No. 43 Numerical on applications of OP-Amp (excluding differentiator and integrator).

Q No. 44 Numerical on AM.

Q No. 45 Numerical on four variable K-map (two groups).
