

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	LA
				1M	2M	3M	5M	1M	1M	2M	3M	5M	1M	2M	3M	5M	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							
	<b>Total</b>	<b>120</b>	<b>105</b>	9	6	12	10	5	5*	06	06	15	01	04	06	10	10
				<b>37</b>				<b>37</b>					<b>21</b>				<b>10</b>

\* – Fill in the blank, HOTS – Higher order thinking, E –Essay type Question, N-Numerical Problems

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

### **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  $V_{BE} = 0.7 \text{ V}$  and  $r_e' = 26\text{mV}/I_E$  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).

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