

ANURAG Engineering College

(An Autonomous Institution)

II B.Tech II Semester Supplementary Examinations, December – 2024**PULSE AND DIGITAL CIRCUITS****(ELECTRONICS AND COMMUNICATION ENGINEERING)****Time: 3 Hours****Max. Marks: 75****Section – A (Short Answer type questions)****(25 Marks)****Answer All Questions**

	Course Outcome	B.T Level	Marks
1. What is linear wave shaping? Give some examples.	CO1	L1	2M
2. Explain an uncompensated attenuator.	CO1	L2	3M
3. State the clamping circuit theorem.	CO2	L1	2M
4. Show the transfer characteristics of two level clipper.	CO2	L2	3M
5. List the applications of Multivibrators.	CO3	L2	2M
6. How can be hysteresis eliminated in a Schmitt trigger?	CO3	L1	3M
7. Write the Methods of Generating Time Base Waveform.	CO4	L1	2M
8. What is mean by schronization with frequency division .	CO4	L1	3M
9. Give the circuit diagram of unidirectional sampling gate.	CO5	L1	2M
10. List the applications of blocking oscillators.	CO5	L1	3M

Section B (Essay Questions)**Answer all questions, each question carries equal marks.****(5 X 10M = 50M)**

11. A) Apply square wave signal to high pass RC circuit and draw the wave shapes and calculate percentage tilt.	CO1	L2	10M
OR			
B) Sketch an integrating circuit with a square wave input. Explain how the wave shape obtained.	CO1	L2	10M
12. A) Classify different types of clipper circuits. Draw their circuits and explain their operation and also transfer characteristics.	CO2	L2	10M
OR			
B) List and explain all the transistor switching times, with a neat diagram.	CO2	L2	10M
13. A) Explain the working principle of bistable multivibrator circuit with neat waveforms and also list the merits and limitations of it.	CO3	L2	10M
OR			
B) Compare multivibrators with all stable state voltages and currents.	CO3	L2	10M
14. A) With a neat sketch, explain about transistor miller time base generator.	CO4	L2	10M
OR			
B) Utilize the frequency division concept in sweep circuit along with circuit diagram.	CO4	L3	10M
15. A) Develop the circuit diagram for six diode sampling gate with operation.	CO5	L3	10M
OR			
B) Construct the Monostable blocking oscillator using emitter timing.	CO5	L3	10M