

ASSIGNMENT
4th Semester Electronics Engineering
ELECTRONIC CIRCUITS

SECTION - A

Fill in the blanks: -

1×10

1. In class A amplifier, collector current flows for ____ cycle.
2. In RC phase shift oscillator, each RC section causes phase shift of ____ degree.
3. Integrator circuit is ____ filter.
4. An electronic circuit that generates square wave is called ____.
5. The gain of emitter follower circuit is ____.
6. Positive feedback is used in ____.
7. The RC Coupled amplifiers are cascaded, if voltage gain of each stage is 10, the overall gain of cascaded amplifier is ____.
8. In 555 timer ____ pin is used for trigger pulse.
9. In a series RC circuit, Impedance is equal to ____.
10. Class ____ power amplifier has the highest collector efficiency..

SECTION –B

NOTE: Do any five questions.

3×5

- 1) What do you mean by Feedback amplifier in electronic circuits. Derive expression of gain with negative feedback?
- 2) Draw circuit diagram of tuned collector oscillator? Explain its operation.
- 3) Draw the circuit and explain operation of class B push pull amplifier? List its advantages and limitations.
- 4) What is emitter follower? Explain its working.
- 5) What is the need of multistage amplifier? Explain it.
- 6) Draw the circuit diagram of a two stage RC coded amplifier? Explain its working and frequency response.
- 7) What are differences between voltage and power amplifiers?

SECTION - C

NOTE: Do any five questions.

5×5

- 1) Draw block diagram of operational amplifier. Explain functions of each stage in brief?
- 2) Explain with circuit diagram, how operational amplifier work as integrator and differentiator?
- 3) Explain with neat circuit diagram, operation and working of Hartley oscillator?
- 4) Draw block diagram of 555 timer. Explain function of each pin?
- 5) What is tuned amplifier? Explain with the help of circuit diagram, the working of single tuned amplifier?
- 6) Draw circuit diagram of astable multivibrator and describe its working?
- 7) Draw circuit diagram of positive and negative clipper? How does it work?