

[illegible]

SECTION-B

- Q2. Derive the expression for gate width of a Monostable Multivibrator considering the effect of Reverse saturation current.
- Q3. Draw the diode differentiator comparator circuit and explain the operation of it when ramp input signal is applied.
- Q4. Explain various transistor switching times.
- Q5. What is Schottky diode? How is it used for reducing storage time?
- Q6. Derive an expression for the lower cut-off frequency of a high-pass circuit.

SECTION-C

- Q7. a). Explain the attenuator circuit, with suitable equations and waveforms.
b) Explain fixed-bias and self-bias bistable multivibrator.
- Q8. What is meant by a low-pass circuit? Derive an expression for the output of a low-pass circuit excited by a square-wave input.
- Q9. a) Why a charge Compensating Capacitor is used in diode switch?
b) Draw the Circuit Diagram of double diode clipper which limits at two independent levels and explain it with its transfer characteristic.