

**Article A : Introduction****A-1 to A-22**

Syllabus : Introduction to Electrical engineering, Concept of emf, Current, Electric Potential, Potential Difference, Resistance, Ohm's Law, Concept of Inductor and Capacitor, Introduction to Electronics engineering.

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Unit I

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- **Review Questions**

Unit IV**Chapter 9 : Digital Electronics****9-1 to 9-46**

Syllabus : Logic Gates : Fundamental, Derived and exclusive logic gates : Symbol, Operation, Truth table, Timing diagram, Concept of universal gates.

Combinational Logic Circuit : Reduction of digital expressions by Boolean algebra and De Morgan's Theorem, Half and full adder.

Sequential Logic Circuit : Flip – Flop (SR, D, JK & T) : Construction, Working, Truth table, Types of triggering, **2 bit synchronous and asynchronous counter** : Construction and operation.

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