

(2)

- (b) Write notes on the following :
- (i) Gray code
 - (ii) Excess-3 code
- (c) State De-Morgan's law. Also prove De-Morgan's theorem.

Unit-II

2. (a) Draw and explain SR flip-flop.
- (b) What is Multiplexer ? Explain 4×1 Multiplexer.
- (c) Explain Shift register in brief.

Unit-III

3. (a) Explain astable multivibrator circuits.
- (b) Draw and explain edge-triggered flip-flop.
- (c) Explain RTL integrated circuit in logic family with its advantages.

Unit-IV

4. (a) Explain different addressing modes with example.
- (b) Explain DMA transfer in detail.
- (c) Explain and draw block diagram of IOP.

(3)

Unit-V

5. (a) Explain virtual memory in detail.
- (b) Briefly explain different memory management techniques.
- (c) Explain magnetic disk with its diagram.
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