

# **AE-1250**

B.Sc. (Part - II)  
Term End Examination, 2016-17

## **INFORMATION TECHNOLOGY**

Paper - I

Digital Circuits and  
Computer Hardware

*Time* : Three Hours]      [*Maximum Marks* : 50

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**Note** : Answer **all** questions. All questions carry equal marks.

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### **Unit-I**

1. Explain any three types of Binary Codes.  
Explain with examples.

**OR**

Explain K-map and simplification of K-map.

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*(Turn Over)*

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**Unit-II**

2. Explain Half Adder and Full Adder.

**OR**

Explain the following :

- (a) Encoder
- (b) Decoder
- (c) BCD-codes

**Unit-III**

3. What is Latch ? Explain Edge-triggered Flip-flop.

**OR**

Define the following :

- (a) TTL
- (b) CMOS
- (c) RTL

**Unit-IV**

4. Explain the various types of Addressing modes.

**OR**

What is DMA and IOP ?

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**Unit-V**

5. Explain the various Memory Management Techniques.

**OR**

What is Virtual memory ?

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