

AJ-1156
B.Sc. Part-II
Term End Examination, 2021-22
Information Technology
(Paper-I)

Time : 3 hours]

[Maximum Marks : 50

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

Unit-I

1. Explain the following:

- (a) Excess 3 code
- (b) K-map

OR

Explain the following:

- (a) De Morgan's theorem
- (b) Boolean expression.

Unit-II

2. Define multiplexer. Explain BCD adder in detail.

OR

Write the definition of flip-flop. Explain SR flip-flop in detail.

Unit-III

3. Explain the following:

- (a) TTL
- (b) Latch

OR

Explain the following:

- (a) CMOS
- (b) Edge-triggered flip-flop.

Unit-IV

4. Explain register and stack organization in detail.

OR

Define interrupt. Explain IOP in detail.

Unit-V

5. Explain cache memory in detail.

OR

Explain the following:

- (a) Associative memory
- (b) Virtual memory