

Exam. Code : 107202

Subject Code : 1650

Bachelor of Computer Application (BCA) 2nd Semester
(Batch 2022-25)

PRINCIPLES OF DIGITAL ELECTRONICS
Paper-II

Time Allowed—3 Hours] [Maximum Marks—75

Note :— Attempt FIVE questions in all, selecting at least ONE question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION-A

1. Explain the concept of 1's and 2's complement.
2. What are BCD and Grey Codes ?

SECTION-B

3. What are different minimization techniques ? Explain any one.
4. What is a Universal gate ? How are other gates constructed using it ?

SECTION-C

5. Design and explain an adder of your choice.
6. What are Flip-Flops ? Explain any two types of these briefly.

SECTION-D

7. Write about the following :
 - (a) Static Vs Dynamic devices
 - (b) Read Only and Random Access chips
8. Write and explain a timing diagram.