



PAPER ID-311295

Printed Page: 2 of 2

Subject Code: BOE310

Roll No:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

BTECH
(SEM III) THEORY EXAMINATION 2023-24
DIGITAL ELECTRONICS

TIME: 3HRS

M.MARKS: 70

6. Attempt any one part of the following:

7 x 1 = 7

a.	Describe the process of state reduction and assignments in sequential circuit design.	7	4
b.	Discuss the concept of race-free state assignment and how it is achieved.	7	4

7. Attempt any one part of the following:

7 x 1 = 7

a.	Describe the working principles of PLA and PAL and their applications.	7	5
b.	Explain the concepts of fan-out, fan-in, and noise margin in digital circuits.	7	5