

Class Test II October 2023
Sub: 3ETRC2 Digital Electronics

Time: 70 min

Max Marks: 20

Note: Attempt any four questions. All questions carry equal marks.

Q.1 Determine AND-NOR function of following function.

$$f(a,b,c,d) = \sum m(2,3,4,6,9,11,12,13)$$

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Q.2 Design Excess-3 adder using 4-bit parallel adder 74LS83

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+ Q.3 Design a truth table for 8 to 3 priority encoder.

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Q.4 Design an 8-4-2-1 BCD to Excess-3 converter.

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Q.5 Convert following SOP expression to POS form.

$$f(a,b,c,d) = A'B'C' + AB'C' + A'BC'$$

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