Total No. of printed pages = 6

RETEST EXAMINATION = 2019

Semester: 4th (Old)

Subject Code: Et-403

DIGITAL ELECTRONICS

Full Marks - 70

Time - Three hours

The figures in the margin indicate full marks for the questions.

Instruction:

1. All questions of PART - A are compulsory.

PART-A

Marks - 25

1. Multiple choice questions:

1×5=5

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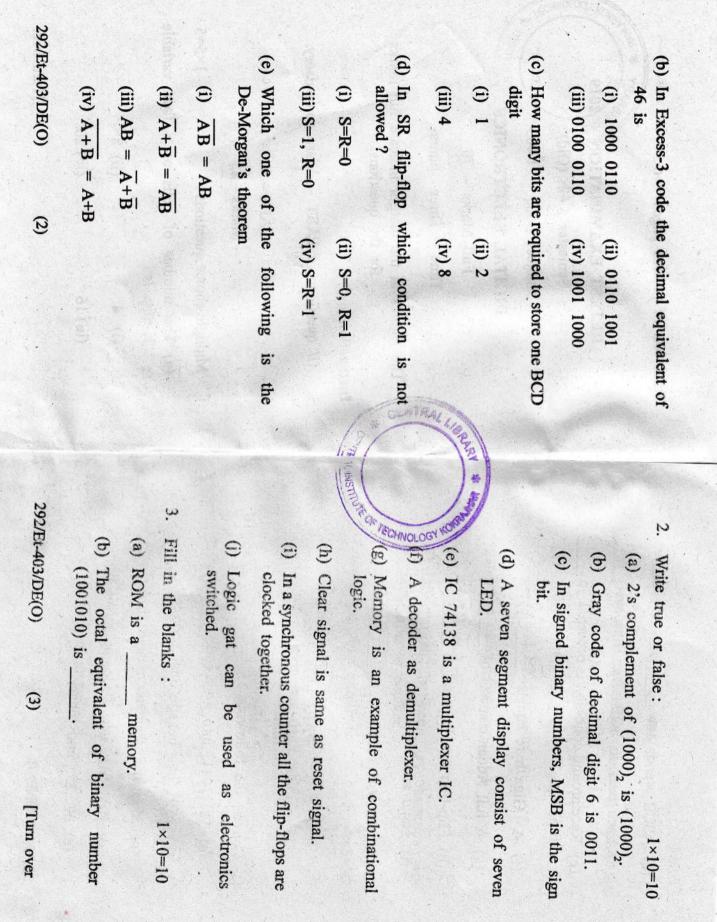
- (a) The number of cells of a four variable K-map is
 - (i) 4

(ii) 8

(iii) 16

(iv) 20

[Turn over



300(W) 292/Et-403/DE(O)	(d) 101111011 ₂ into 2's complement from (e) 625.25 ₁₀ into binary. (d) What is	(c) What of sh	2×5=10 (b) Minin K-Ma	(a)	65TH Ans	HNOLE	(c)	(6)	Each term in SOP form is called (a) Give Race around condition is occurred in dynam
(O) (5) [Turn over	What is a counter? Explain the principle of a 4-bit counter.	What is shift register? Explain any one type of shift register with neat diagram.	Minimise the following logic function using K-Map method. f(A,B,C,D) = (0,124578) + d (10,11,14)	What is flip-flop? Describe JK flip-flop with circuit diagram and truth table.	ny four questions: 4×5=20	Distinguish between synchronous and asynchronous counter.	Prove using Boolean algebra $A + \overline{A}B = A + B.$	With symbol and truth table, define OR, NOR and EX OR gate.	(a) Give the difference between static and dynamic RAM.

- (e) What is multiplexer? Draw and explain the logic circuit of a 4:1 multiplexer.
- (f) Write short note on any one of the following:
 - (i) LED and LCD
 - (ii) TTL circuit
 - (iii) A/D converter.

