Printed Page:-

Roll No.

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute)

Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow M.Tech

FIRST YEAR (SEMESTER-II) THEORY EXAMINATION (2020-2021)

(Subjective Type)

Subject Code: AMTVL0202

Max. Mks. : 30

Time : 50 Minutes

General Instructions:

All questions are compulsory.

Subject: Low Power VLSI Design

Question No. 1 to 15 are subjective type question carrying 3 marks each. Attempt any 10 out of 15 questions.

Q.No.	Question Content	Question Image	Category	Sub Category	Marks	Options Randomization	Туре	Difficulty
1	What is W/ L ratio?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
2	What is difference between PMOS and NMOS?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
3	What happens when a capacitor is charging and discharging? Explain.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
4	Explain total power dissipation in low power VLSI design.		Attempt any 10 questions	10 x 3=30	3		Subjective	Smart
5	Write short notes on Gate-level Power Analysis.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
6	What is Entropy? Explain how information rate is related with entropy.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
7	What is Gray Code?		Attempt any 10 questions	10 x 3=30	3		Subjective	Smart
8	What is the difference between dynamic power and static power?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
9	What is edge triggered flip flop?	Page 1 of	Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant

Page 1 of 2

Q.No.	Question Content	Question Image	Category	Sub Category	Marks	Options Randomization	Туре	Difficulty
10	What is SRAM? Explain with the help of circuit diagram.		Attempt any 10 questions	10 x 3=30	3		Subjective	Smart
11	What is the function of full adder?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
12	What is multiplexer and its types?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
13	What is difference between average power and energy?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
14	What is J K Flip Flop? Explain.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
15	What does activity factor means? Explain.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant