

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
ME Semester –II Examination Dec. - 2011

Subject code: 1722602

Date: 12/12/2011

Subject Name: CMOS Circuit Design II

Time: 02.30 pm – 05.00 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) With necessary figures explain Micropower Op-amps. **07**
(b) Discusses the Speed and Noise Issues for References. **07**

- Q.2** (a) Draw and explain the Generation of PTAT current using a simple amplifier. **07**
(b) Sketch the schematic of an adaptive voltage follower that can source or sink current. **07**

OR

- (b) With necessary figures explain High-Speed Op-amps. **07**

- Q.3** (a) Write a short note on Row/Colum Decoder. **07**
(b) Explain the operation of Sense Amplifier with necessary figures. **07**

OR

- Q.3** (a) Explain the operation of Decision Circuit. **07**
(b) What is Jitter? Explain for PLL. **07**

- Q.4** (a) Explain the problem of Lock Acquisition for PLL. **07**
(b) Explain the operation of Parallel DAC. **07**

OR

- Q.4** (a) Explain the operation of Serial ADC. **07**
(b) Write a short note on Floating Gate Memory. **07**

- Q.5** (a) Explain the effect of junction capacitance nonlinearity in Switched Capacitor Integrator. **07**
(b) List different types of Switched-Capacitor Amplifier and Explain any one in detail. **07**

OR

- Q.5** (a) Explain the operation of Monostable Multi Vibrator. **07**
(b) Write a short note on Voltage Generators. **07**
