Reg. No.:					

Question Paper Code: 52732

M.E. DEGREE EXAMINATION, NOV 2016

Third Semester

VLSI Design

15PVL302 - ANALYSIS AND DESIGN OF ANALOG INTEGRATED CIRCUITS

(Regulation 2015)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

 $(5 \times 20 = 100 \text{ Marks})$

1. (a) Explain the large signal behavior of MOSFET. (20)

Or

- (b) Explain about the Depletion region in PN junction. (20)
- 2. (a) Explain the difference amplifier with active load using BJT with relevant expression. (20)

Or

- (b) Explain the Source follower output stage in detail. (20)
- 3. (a) Explain the frequency response characteristics of any one multistage amplifier with relevant expression. (20)

Or

- (b) Explain the AC analysis of operational amplifier. (20)
- 4. (a) Explain in detail about Voltage Controlled Oscillator with relevant expression. (20)

Or

(b) Discuss the noise models of the various integrated circuit components. (20)

(a) Explain the MOS two stage operational amplifier in detail. (20)
Or
(b) Discuss the Band-gap-referenced bias circuits in bipolar technology. (20)