C 48875

Name....

Reg. No

FOURTH SEMESTER B.TECH. (ENGINEERING) DEGREE J JUNE 2008

CS 04 406—ELECTRONICS CIRCUITS AND SYSTEMS

(2004 admissions)

Time : Three Hours

Maximum: 100 Marks

Part A

Answer all the questions.

- 1. Explain Diode switch briefly.
- 2. Explain Transistor switch briefly.
- 3. What are the different logic levels ? Explain.
- 4. Give a brief comparison of all the logic families.
- 5. What are the different type of memories ? Explain briefly.
- 6. What are special memories ? Explain.
- 7. What is the need for modulation ?
- 8. Explain briefly about frequency modulation.

 $(8 \times 5 = 40 \text{ marks})$

Part B

1. What are the different clipping and clamping circuits ? Explain in detail.

Or

Explain Miller and Bootstrap sweep generators in detail.

2. Draw a 3 input standard TTL based NAND gate and explain the necessary conditions of how the truth is obtained.

Or

Explain how and why we go for interfacing between different logics ?

3. What is RAM ? Explain its various classification with necessary circuits sketch.

Or

Explain special memories in detail with necessary sketch.

4. Explain amplitude modulation and demodulation in detail with necessary sketch.

Explain TRF and superheterodyne receivers with neat blocks diagram.

 $(4 \times 15 = 60 \text{ marks})$