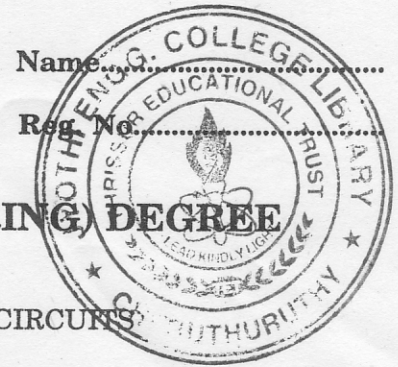C 6082

FOURTH SEMESTER B. TECH. (ENGINEERING) DEGREE EXAMINATION, JUNE 2010

AI 04 404 – ANALYSE ELECTRONICS AND PULSE CIRCUITS

(2004 Admissions)

Time : Three Hours   Maximum : 100 Marks

Part A

Answer **all** *the questions.*

1. What are power amplifiers? Explain.
2. Explain Push-pull amplifiers briefly.
3. Explain the principle behind feedback amplifiers.
4. Write down the criteria for oscillation and explain.
5. What is the Linear wave shaping? Explain briefly.
6. Explain logic inverter briefly.
7. Briefly explain monostable multi-vibrator.
8. Explain voltage time base generators.

(8 × 5 = 40 marks)

Part B

1. Draw the transformer coupled class A power amplifier circuit and explain in detail.

Or

Explain in detail about the tuned BJT amplifiers.

(15 marks)

2. Analyse voltage series and current series circuit and derive the required results.

Or

Draw the circuit for RC phase shift oscillator and deduce the required conditions.

(15 marks)

3. Analyse the behaviour at steady state for square and ramp inputs to second order system.

Or

Explain the working of a Schmitt trigger circuit in detail.

(15 marks)

4. Explain Miller and Bootstrap time base generator in detail.

Or

Explain the working of 555 timer IC in detail with the help of block diagram.

(15 marks)

[4 × 15 = 60 marks]