C 31830

Name.......................................

Reg. No...................................

FOURTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION, JUNE 2007

EC 04 405—ELECTRONIC CIRCUITS—II

[2004 admissions]

Time : Three Hours | Maximum : 100 Marks

I. (a) Define slew rate. What causes slew rate ?

(b) List the ideal characteristics of Op-amp.

(c) Write the concept of pulse transformer.

(d) Draw RC differentiation and explain the principle.

(e) Write the principle of miller circuit.

(f) Write the basic concept of monostable multivibrator.

(g) Write the function of class-D power amplifier.

(h) Write short notes on broadbanding using inductive loads.

(8 × 5 = 40 marks)

II. (a) Discuss the principle of differential amplifier with active load. (15 marks)

Or

(b) (i) Explain the operation of MOS differential pair. (7 marks)

(ii) Also discuss the large and small signal operation. (8 marks)

III. (a) (i) Explain the concept of triggering. (7 marks)

(ii) Draw the Schmitt trigger and explain its operation. (8 marks)

Or

(b) Explain the bistable multivibrator principle and application. (15 marks)

IV. (a) Explain the collector coupled version of astable multivibrator. (15 marks)

Or

(b) Draw the bootstrap circuit and explain the operation with neat diagram and waveforms. (15 marks)

V. (a) Discuss the operations of class AB and class C power amplifiers. (15 marks)

Or

(b) Discuss the concept of wide band amplifiers in detail. (15 marks)

[4 × 15 = 60 marks]