

C 26898

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Name

Reg. No

**FOURTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION
MAY 2012**

AI 09 405—ELECTRONIC CIRCUITS—II

(2009 admissions)



Time : Three Hours

Maximum : 70 Marks

Part A

Answer all questions.

1. What are commutating capacitors ?
2. Define sweep speed.
3. Draw the block diagram of a current shunt feedback amplifier.
4. Give the application of class A, class B and class C power amplifiers.
5. What is Barkhausen criterion ?

(5 × 2 = 10 marks)

Part B

Answer any four questions.

1. Explain the working of a MOS inverter.
2. Discuss the general features of a time base signal. Draw the schematic diagrams of Miller and Bootstrap time base generators.
3. Discuss on the frequency stability of an oscillator.
4. Discuss the efficiency of class A, class B, and class C and class AB amplifiers.
5. Explain the working of a PLL.
6. Discuss effect of negative feedback on input impedance of a voltages hunt feedback circuit and current series feedback circuit.

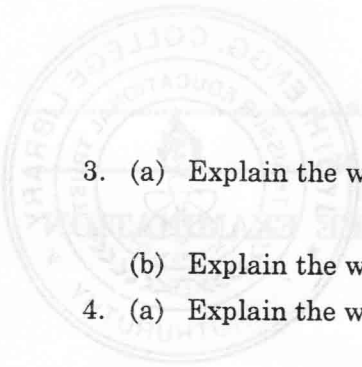
(4 × 5 = 20 marks)

Part C

Answer all questions.

1. (a) Explain the working of a UJT sweep circuit.
Or
(b) Explain the working of a Schmitt trigger circuit.
2. (a) Explain the working of 555 IC timer as a monostable multivibrator.
Or
(b) Explain any two applications of PLL.

Turn over



3. (a) Explain the working of a Wein bridge oscillator.

Or

(b) Explain the working of a Hartley oscillator.

4. (a) Explain the working of transformer coupled class A power amplifier.

Or

(b) Explain the working of class C amplifiers.

(4 × 10 = 40 marks)

Part A

Answer all questions

1. What are compensating networks?

2. Define sweep speed.

3. Draw the block diagram of a current shunt feedback amplifier.

4. Give the application of class A, class B and class C power amplifiers.

5. What is Barkhausen criterion?

(5 × 2 = 10 marks)

Part B

Answer any four questions

1. Explain the working of a push-pull amplifier.

2. Discuss the general features of a thin base diode. Draw the schematic diagram of Miller and

lowering time base generators.

3. Discuss on the frequency stability of an oscillator.

4. Discuss the efficiency of class A, class B, and class C and class AB amplifiers.

5. Explain the working of a PLL.

6. Discuss the effect of positive feedback on input impedance of a voltage shunt feedback circuit and

current series feedback circuit.

(4 × 5 = 20 marks)

Part C

Answer all questions

1. (a) Explain the working of a JFET sweep circuit.

Or

(b) Explain the working of a Schmitt trigger circuit.

2. (a) Explain the working of 555 IC timer as a monostable multivibrator.

Or

(b) Explain any two applications of PLL.

Turn over