C 58200

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Name

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FOURTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION, JUNE 2009

AI 04 404-ANALOG ELECTRONICS AND PULSE CIRCUITS

(2004 Admissions)

Time : Three Hours

Maximum : 100 Marks

Part A

Answer the following questions.

- 1. What are push pull amplifiers ? Explain.
- 2. Differentiate synchronous and stagger tuning.
- 3. Give the advantages of negative feedback amplifiers.
- 4. What is frequency stability ? Explain briefly.
- 5. Give the various application when transistor act as a switch.
- 6. What are commutating capacitors ? Explain.
- 7. What are current time base generators explain?
- 8. Give the applications for 555 timer.

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

Part B

1 Explain class B push pull amplifiers and explain also with its complimentary symmetry.

Or

What is class C amplifier ? What is its main application ? Explain.

2. What are the principles of feedback in amplifiers ? Explain and analyse voltage series and voltage shunt circuits.

Or

Explain colpilts and crystal oscillator in detail.

3. Explain logic inverter and Ebers-Moll model of BJT in detail.

Or

Explain monostable multivibrators in detail with the help of a neat sketch.

4. Give the block diagram for 555 timer IC and explain its working.

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Or

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With the help of 555 timer IC explain the working of astable circuit.

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

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