Code.No: NR310404 | NR | SET-1

III B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010
LINEAR AND DIGITAL IC APPLICATIONS
(COMMON TO ECE, EIE, ECONE, MCT, ETM)

Time: 3hours **Max.Marks:80**

Answer any FIVE questions
All questions carry equal marks
- - -

1.a) Derive the voltage gain for non-inverting amplifier.
b) List different IC packages.
c) Draw the general block diagram of 741 and explain. [6+4+6]

2. a) Draw and explain logarithamic amplifier.
b) Define the following terms.
i) CMRR
ii) Slew rate
iii) Input off set voltage
iv) Input bias current. [8+8]

3. a) Draw and explain schematic diagram of IC565.
b) Write applications of PLL.
c) Write characteristics of three terminal regulators. [8+4+4]

4. a) Draw and explain balanced modulator IC1496
b) Write applications of 555 timer. [10+6]

5. a) Draw the BPF and explain.
b) Draw the ideal characteristics of LPF, HPF and BPF.
c) Explain need of all pass filters. [6+6+4]

6. a) Draw and explain DTL.
b) Draw the J-K Flip-Flop and explain operation with truth table. [8+8]

7. a) Explain interfacing of logic families.
b) Explain weighted Resister R-2R ladder. [8+8]

8. a) Explain successive approximation with neat diagram.
b) What is sample and hold circuit and explain. [8+8]

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Code.No: NR310404 | NR | SET-2

III B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010
LINEAR AND DIGITAL IC APPLICATIONS
(COMMON TO ECE, EIE, ECONE, MCT, ETM)

Time: 3hours **Max.Marks:80**

Answer any FIVE questions
All questions carry equal marks
- - -

1. a) Draw and explain schematic diagram of IC565.
   b) Write applications of PLL.
   c) Write characteristics of three terminal regulators. [8+4+4]

2. a) Draw and explain balanced modulator IC1496
   b) Write applications of 555 timer. [10+6]

3. a) Draw the BPF and explain.
   b) Draw the ideal characteristics of LPF, HPF and BPF.
   c) Explain need of all pass filters. [6+6+4]

4. a) Draw and explain DTL.
   b) Draw the J-K Flip-Flop and explain operation with truth table. [8+8]

5. a) Explain interfacing of logic families.
   b) Explain weighted Resister R-2R ladder. [8+8]

6. a) Explain successive approximation with neat diagram.
   b) What is sample and hold circuit and explain. [8+8]

7.a) Derive the voltage gain for non-inverting amplifier.
   b) List different IC packages.
   c) Draw the general block diagram of 741 and explain. [6+4+6]

8. a) Draw and explain logarithamic amplifier.
   b) Define the following terms.
      i) CMRR
      ii) Slew rate
      iii) Input off set voltage
      iv) Input bias current. [8+8]

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Code.No: NR310404 | NR | SET-3

III B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010
LINEAR AND DIGITAL IC APPLICATIONS
(COMMON TO ECE, EIE, ECONE, MCT, ETM)

Time: 3hours **Max.Marks:80**

Answer any FIVE questions
All questions carry equal marks
- - -

1. a) Draw the BPF and explain.
   b) Draw the ideal characteristics of LPF, HPF and BPF.
   c) Explain need of all pass filters. [6+6+4]

2. a) Draw and explain DTL.
   b) Draw the J-K Flip-Flop and explain operation with truth table. [8+8]

3. a) Explain interfacing of logic families.
   b) Explain weighted Resister R-2R ladder. [8+8]

4. a) Explain successive approximation with neat diagram.
   b) What is sample and hold circuit and explain. [8+8]

5.a) Derive the voltage gain for non-inverting amplifier.
   b) List different IC packages.
   c) Draw the general block diagram of 741 and explain. [6+4+6]

6. a) Draw and explain logarithamic amplifier.
   b) Define the following terms.
      i) CMRR
      ii) Slew rate
      iii) Input off set voltage
      iv) Input bias current. [8+8]

7. a) Draw and explain schematic diagram of IC565.
   b) Write applications of PLL.
   c) Write characteristics of three terminal regulators. [8+4+4]

8. a) Draw and explain balanced modulator IC1496
   b) Write applications of 555 timer. [10+6]

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Code.No: NR310404 | NR | SET-4

III B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010
LINEAR AND DIGITAL IC APPLICATIONS
(COMMON TO ECE, EIE, ECONE, MCT, ETM)

Time: 3hours **Max.Marks:80**

Answer any FIVE questions
All questions carry equal marks

\- - -

1. a) Explain interfacing of logic families.
   b) Explain weighted Resister R-2R ladder. [8+8]

2. a) Explain successive approximation with neat diagram.
   b) What is sample and hold circuit and explain. [8+8]

3.a) Derive the voltage gain for non-inverting amplifier.
   b) List different IC packages.
   c) Draw the general block diagram of 741 and explain. [6+4+6]

4. a) Draw and explain logarithamic amplifier.
   b) Define the following terms.
      i) CMRR
      ii) Slew rate
      iii) Input off set voltage
      iv) Input bias current. [8+8]

5. a) Draw and explain schematic diagram of IC565.
   b) Write applications of PLL.
   c) Write characteristics of three terminal regulators. [8+4+4]

6. a) Draw and explain balanced modulator IC1496
   b) Write applications of 555 timer. [10+6]

7. a) Draw the BPF and explain.
   b) Draw the ideal characteristics of LPF, HPF and BPF.
   c) Explain need of all pass filters. [6+6+4]

8. a) Draw and explain DTL.
   b) Draw the J-K Flip-Flop and explain operation with truth table. [8+8]

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