



H1073

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# APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

## Scheme for Valuation/Answer Key

*Scheme of evaluation (marks in brackets) and answers of problems/key*

**EIGHTH SEMESTER B.TECH DEGREE EXAMINATION, MAY 2019**

**Course Code: EC462**

**Course Name: MIXED SIGNAL CIRCUITDESIGN**

Max. Marks: 100

Duration: 3 Hours

### PART A

*Answer any two full questions, each carries 15 marks.*

Marks

- |      |  |      |
|------|--|------|
| 1 a) | cktdgm -2, gain – 3, output impedance - 3    | (8)  |
| b)   | cktdgm -2, working – 3, adv - 2              | (7)  |
| 2 a) | cktdgm -2, working – 2, output impedance - 3 | (7)  |
| b)   | cktdgm -3, output impedance - 5              | (8)  |
| 3 a) | effect - 5                                   | (5)  |
| b)   | cktdgm -4, output impedance - 6              | (10) |

### PART B

*Answer any two full questions, each carries 15 marks.*

- |      |  |      |
|------|--|------|
| 4 a) | Ckt-4, miller effect-2, derivation - 4 | (10) |
| b)   | Gain - 5                               | (5)  |
| 5 a) | Ckt -4, working -4                     | (8)  |
| b)   | Block diagram – 4, explanation - 3     | (7)  |
| 6 a) | Ckt -4, explanation -4                 | (8)  |
| b)   | Principle -3, ckt - 4                  | (7)  |

### PART C

*Answer any two full questions, each carries 20 marks.*

- |      |  |      |
|------|--|------|
| 7 a) | Charge injection effect -2, ckt – 3, clock feed through -2, ckt -3 | (10) |
| b)   | Ckt – 4, working - 6   | (10) |
| 8 a) | Specifications (3), explanation - 7                                | (10) |
| b)   | Ckt -5 , explanation -5  | (10) |
| 9 a) | Ckt – 4 , explanation -6   | (10) |
| b)   | Ckt -4, explanation -6   | (10) |

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