

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: EC404

Course Name: ADVANCED COMMUNICATION SYSTEMS

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any two full questions, each carries 15 marks.

- | | Marks |
|--|-------|
| 1 a) Block Dia 4marks + Explanation 4 marks | (8) |
| b) Block Dia 3marks + Explanation 4 marks | (7) |
| 2 a) Block Dia 4marks + Explanation 6 marks | (10) |
| b) Explanation 5 marks | (5) |
| 3 a) Sample pixel block 2 marks + Explanation 8 Marks | (10) |
| b) Comparison of any five features of LCD/LED Display system-5 Marks | (5) |

PART B

Answer any two full questions, each carries 15 marks.

- | | |
|--|-----|
| 4 a) Explanation with equations 5 marks | (5) |
| b) Block Diagram 2 marks + Explanation 3 marks | (5) |
| c) We have $(C/N) = EIRP + (G/T) - L - k - B$
Or $EIRP = (C/N) - (G/T) + L + k + B$ (All quantities in Decibels) (Equation 2 Marks)
Substitute Values:
$EIRP = 22 - 31 + 210 + (-228.6) + 75.56 = 47.96 \text{ dB}$
(EIRP 3 Marks), Total(2+3)=5 Marks | (5) |
| 5 a) Explanation 5 marks | (5) |
| b) Block Dia 3 marks + Explanation 4 marks | (7) |
| c) Explanation 3 marks | (3) |
| 6 a) Explanation about at least 3 versions- 5 marks | (5) |
| b) Explanation 7 marks | (7) |
| c) Explanation 3 marks | (3) |

PART C

Answer any two full questions, each carries 20 marks.

- | | |
|--|------|
| 7 a) Explanation 5 marks | (5) |
| b) Diagram 4 marks + Explanation 6 marks | (10) |
| c) Diagram 2 marks + Explanation 3 marks | (5) |



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- 8 a) Diagram 1 marks + Explanation 4 marks (5)
- b) Diagram 2 marks + Explanation 3 marks (5)
- c) Block Diagram 4 marks + Explanation 6 marks (10)
- 9 a) Block Diagram 3 marks + Explanation 3 marks (6)
- b) Diagram 3 marks + Explanation 5 marks (8)
- c) Block Diagram 3 marks + Explanation 3 marks (6)

