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मधुर - 035

Electronics Communication (1110)

P. Pages : 2

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answersheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Solve **any two** sub questions from each unit.
5. Draw diagrams whenever necessary.
6. Assume suitable data if necessary.
7. Use of non-programmable calculator is allowed.

UNIT - I

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|----|----|-----|--|---|
| 1. | a) | i) | Convert the absolute power ratio of 200 to power gain in dB. | 4 |
| | | ii) | Define time domain & frequency domain with an examples. | 6 |
| | b) | i) | Define & explain data communication network architecture. | 5 |
| | | ii) | What are data communication n/w components. | 5 |
| | c) | i) | Draw & explain interlaced scanning. | 5 |
| | | ii) | Explain block diagram of black & white television transmitter. | 5 |

UNIT - II

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|----|----|-----|--|---|
| 2. | a) | i) | Define : | 5 |
| | | a) | Microwave. | |
| | | b) | What is frequency & frequency band in microwave. | |
| | | c) | Advantages & disadvantages of microwave. | |
| | | d) | Diversity. | |
| | | ii) | Define & explain protection switching arrangement. | 5 |

- b) i) Define microwave system gain & describe how it is calculated. 10
- c) i) What is mean by scanning & Tracking of radar. Also explain its type. 5
- ii) Define & explain Doppler effect. 5

UNIT - III

- 3. a) Describe operation & basic functions of standard telephone set. 10
- b) i) Define & explain call progress tone & signal. 5
- ii) Short note on : DTMF. 5
- c) Give the explanation of following terms. 10
- a) Caller ID system.
- b) Crosstalk.

UNIT - IV

- 4. a) What is mean by Automated central office switches & exchange. Define circuits, circuit switches & circuit switching. 10
- b) Define & explain inter office Trunks & Tandem Trunks. 10
- c) Give an explanation of roaming & hand off. 10

UNIT - V

- 5. a) Sketch details of horizontal blanking & synchronous pulse. Why front porch & back porch intervals provided before & after horizontal synchronous pulse. 10
- b) What are television systems presents in the world. Which television system is adopted in India & why. Explain it in detail. 10
- c) Short notes on : 10
- a) DTH.
- b) EDTV
