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Total number of pages: [1]

Total number of questions: 06

B.Tech. || ECE || 6th Sem

Microwave & Radar Engineering

Subject Code: BTEC-601 (RP)

Paper ID: M/18

(2011-2014 batch)

Time allowed: 3 Hrs

Max Marks: 60

Important Instructions:

- All questions are compulsory
- Assume any missing data

PART A (2×10)

Q. 1. Short-Answer Questions:

- (a) What is the principal of Klystron Amplifier?
- (b) Why convention semiconductors are seldom used in microwave applications?
- (c) Draw the characteristics of Gunn diode.
- (d) Write a short note on LASER.
- (e) How a Microwave junction can be used as Duplexer?
- (f) How VSWR can be measured?
- (g) Explain delay line cancellers.
- (h) What is Cluttering?
- (i) Compare different scanning techniques.
- (j) What are different types of RADAR?

PART B (8×5)

Q. 2. Explain the working principal of BWO oscillator along with of its CO1 applications.

OR

Explain in detail Magnetron along with its applications. CO1

Q. 3. Write a short note on different methods for measuring VSWR. CO3

OR

Write a short note on Microwave bridges and their applications. CO3

Q. 4. Design the H-Microwave junction using S-Matrix. CO2

OR

Explain in detail the Ferrite devices along with their applications. CO2

Q. 5. Explain the working of Tunnel diode along with its characteristics and applications. CO1

OR

Write a short note of PIN diode. What are its applications? CO1

Explain in detail different Tracking schemes and carried out their comparison analysis. CO4

OR

Explain the basic principle and operation of Moving Target Indicator radar. CO4