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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -I EXAMINATION- 2022

B.Tech. V Semester (ECE-Backlog)

COURSE CODE: 18B1WEC532

COURSE NAME: Microwave components and Devices

MAX. MARKS: 15

COURSE CREDITS: 04

MAX. TIME: 1 Hrs

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

Q1. Write the characteristics of microwave frequencies and list some of the major applications of microwaves. [2]

Q2. Derive the Telegrapher's equations that describe the relationship between voltage and current on a distributed transmission line model. [5]

Q3. What do you mean by reflection coefficient and what are the methods to reduce this reflection coefficient? [2]

Q4. What do mean by a quarter waver transformer? What is the significance of it? Write the expressions for input impedance of an open circuited and short circuited transmission line. [4]

Q5. What do you mean by standing wave ratio? Give its range. [2]