

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- 2025

PhD-I Semester (PMS)

COURSE CODE (CREDITS): 15P1WPH215 (3)

MAX. MARKS: 35

COURSE NAME: MICROSTRIP ANTENNA DESIGN

COURSE INSTRUCTORS: SKK

MAX. TIME: 2 Hours

Note: (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q.No	Question	Marks
Q1	(a) How can you convert a single patch antenna into a circular and planer array? (b) Calculate the array parameters for both cases (c) Design a rectangular array of 4x4 patches on FR4 (3.4 Dielectric Constant) in the frequency range of 2-4 GHz, Keeping resonant frequency at 3 GHZ	5+5+10
Q2	(a) What is reconfigurable microstrip antenna. (b) Classify reconfigurable microstrip antenna on the basis of uses in different fields (c) Using a diode attached with antenna design basic structure of reconfigurable microstrip antenna to attain frequency reconfigurability.	5+5+5