

**SOME STUDIES ON MULTI-BAND/WIDE-BAND
PLANAR MONOPOLE ANTENNAS FOR
MOBILE HANDSET**



THESIS SUBMITTED FOR THE AWARD OF THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN

ELECTRONICS ENGINEERING

By

Pradutt Kumar Bharti

**DEPARTMENT OF ELECTRONICS ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY
(BANARAS HINDU UNIVERSITY)
VARANASI-221 005, INDIA**

Enrolment No. 312675

June 2015