

Suresh Gyan Vihar University

Gyan Vihar School of Engineering and Technology

Subject : Electronics & Communication Engineering for PhD

Syllabus for Entrance Exam 2018

Unit -1

Satellite communication techniques, state of art, frequency range, advantages, health hazardous radiations, Devices used in communication systems, modulation and demodulation techniques

Unit 2

Properties and applications of electromagnetic waves, band classifications of whole spectrum, advantages of high frequency bands, Infrared , visible, ultraviolet, X rays and gamma rays.

Unit 3

Microwave semiconductor conventional devices: construction, operation and practical applications of pin diode, varactor and tunnel diode, gunn diode, impatt, trappt diodes, bjt, fet,.

Introduction to microstrip lines, Parallel striplines, Coplanar striplines, Shielded striplines, Slot lines, Integrated Fin line, Non-radiative guide.

Unit 4

Semiconductor opto devices, advantages over conventional devices, Laser properties , fabrication, characterization, medical and industrial applications of lasers

Unit 5

. Digital communications and analog communication techniques, conversion methods, advantages, devices for these circuits