D.B.F. Dayanand College of Arts and Science, Solapur

COURSE OUTCOME

Name of Department: ELECTRONICS

B.A. / B.Sc. / M.A. / M.Sc. B.Sc.		
NAME OF SUBJECT Electronics		
SEM I / II / III / IV / V / VI Sem V		
COURSE NUMBER (PAPER NUMBER) **XII**		
TITLE OF COURSE (NAME OF PAPER) **Electronics Communication**		
COURSE CONTENT	OBJECTIVES	OUTCOME
Introduction to Communication System Introduction, Need, importance, Elements of electronic communication system, Types of communication system, analog communication system, digital communication system, concept of simplex and duplex communication, Noise in communication	To get the knowledge about the elements of electronic communication system, types of communication system and noise considerations	Students get the knowledge about the electronic communication system and types of communication
Modulation and Demodulation techniques Need, Types of modulation-Analog and digital modulation. **Analog Modulation: Amplitude modulation:** Principle, mathematical expression, modulation index, Power distribution, frequency spectrum, Concept of DSB, SSB, VSB. **Frequency modulation:** Principle, mathematical expression, modulation index, frequency spectrum, side bands. Demodulation of AM and FM **Digital Modulation**: Introduction to PAM, PWM, PPM, PCM, ASK, FSK, FDM & TDM	To get the knowledge about the need and types modulation , mathematical treatment for AM and FM, demodulation techniques, digital modulation techniques, etc	Students get the knowledge about the AM and FM modulation
Antenna and Radio Wave Propagation Principle of antenna, Concept of radiation pattern, Antenna parameters, Evaluation of ($\lambda/2$) antenna, Types of antenna: Yagi and Parabolic antennas Radio Wave propagation: Principle, types of radio wave propagation: Ground waves, Space waves, Sky waves, Concept of skip distance and Virtual height	To get the knowledge about the different types of antennas, their classification and designing procedures, types of radio wave propagation, etc.	Students get the knowledge about the types of radio wave propagation
Radio receiver and Television Radio receiver: Characteristics of receiver, Superheterodyne principle, Block diagram of AM, FM receivers, Television: Concept and block diagram of Black and White television transmission and reception, TV interlace scanning, Television	To get the knowledge about the radio receiver, their characteristics, television block	Students get the knowledge about the radio receiver, their characteristics, television block

standards, Band requirement, VSB, Composite video signal, Introduction to color TV	diagram, basic principles in B/W and color TV , etc	
Telephone System Principle, telephone handset, subscriber local loop, Need of telephone exchange, Electronic telephone exchange, Different tones in telephone, DTMF dialer	To get the knowledge about the telephone, its working and different tones in telephone	Students get the knowledge about telephone system.

Signature of HOD