

GUJARAT UNIVERSITY
Ahmedabad

ELECTIVE COURSE: PRINCIPLES AND UTILISATION OF DOMESTIC APPLIANCES

UNIT-I:

MICROWAVE OVENS

Microwaves, transit time, magnetrons, wave guides, Microwave oven block diagram, LCD timer with alarm, Single Chip Controllers, Wiring and Safety instructions, Care and Cleaning.

WASHING MACHINES

Electronic controller for washing machines, Washing machine hardware and software, Types of washing machines, Fuzzy logic washing machines, Features of washing machines.

Text Book: Consumer Electronics S. P. Bali Pearson Education P Ltd.
Chapter 50 and 51.

UNIT-II:

HOME / OFFICE DIGITAL DEVICES

Facsimile machine, Xerographic copier, Microprocessors, Microcomputers and Micro controllers

DIGITAL ACCESS DEVICES

Digital computer, Internet access, Online ticket reservation (For railway refer to www.irctc.co.in), Functions and networks, Barcode Scanner and decoder, Electronic Fund Transfer, Automated Teller Machines (ATMs) Set, Top boxes, Digital cable TV, Video on demand.

Text Book: Consumer Electronics S. P. Bali Pearson Education P Ltd.
Chapter 44, 45, and 48, Appendix: A, B, C, D

Unit-III:

IN CAR COMPUTERS

Applications- Electronic ignition, Electronic Ignition Lock System, Anti Brake Locking System (ABS), Electronically Controlled Suspension (ECS) Instrument Panel Displays, Ultrasonic Car Safety Belt System, Air Bag System, Vehicle Proximity Detection System, Car Navigation System

AIR CONDITIONERS AND REFRIGERATORS

Air Conditioning, Components of air conditioning systems, All water air conditioning systems, All air conditioning systems, Unitary and central air conditioning systems, Split air conditioners, Refrigeration, refrigerants, refrigeration systems, domestic refrigerators.

Text Book: Consumer Electronics - S.P. Bali, Pearson Education, New Delhi, 2005.
Chapter 49 and 52.