

Shri Govind Guru University
Godhra
Elective Course: Principles and Utilization of Domestic
Appliances

UNIT I

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

Ref. Book: Consumer Electronics S.P.Bali Pearson Education P Ltd.

Chapter: 44, 45 and 48, Appendix: A, B, C, D

UNIT II

In Car Computer

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.

Ref. Book: Consumer Electronics S.P.Bali Pearson Education P Ltd.

Chapter: 49

UNIT III

Air conditioners and refrigerators

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

Ref. Book: Consumer Electronics S.P.Bali Pearson Education P Ltd.

Chapter : 52

UNIT IV

Microwave ovens

Microwaves, transit time, magnetrons, wave guides, microwave oven block diagram, LCD timer with alarm, Single Chip Controllers, Wiring and Safety instruction, 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.

Ref. Book: Consumer Electronics S.P.Bali Pearson Education P Ltd.

Chapter: 50, 51

- ❖ Each unit contains $\frac{1}{2}$ (half) credit
- Total credit for the subject is 2
- ❖ Total working hours per semester is 26