

HOTEL ENGINEERING

UNIT-I

ORGANISATION OF MAINTENANCE DEPARTMENT

- 1.1 Role & importance of maintenance department in hotel & catering industries.
- 1.2 Organisational chart of maintenance department.
- 1.3 Duties & responsibilities of staff in maintenance department.
- 1.4 Energy sources-heat unit & heat transfer.
- 1.5 Principles of Bunsen burner.
- 1.6 Liquid petroleum gas-properties
- 1.7 Precautions while handling LPG.
- 1.8 High pressure & low-pressure burners & corresponding heat output.
- 1.9 Type of fuel-calorific value.
- 1.10 Comparative study of fuels used in catering industry.
- 1.11 Calculation of account of fuels used in catering industry and its cost factor.

UNIT-II

- 2.1 Electricity- fundamentals of electricity.
- 2.2 Definition of insulators, conductors, current potential difference, resistance power.
- 2.3 Energy and their units & relationship.
- 2.4 DC&AC, single phase, double phase, three phase & its importance on equipment specification.
- 2.5 Electric circuit-open & close, series and parallel connections.
- 2.6 Short circuit, fuses, sockets, switches & earthing.
- 2.7 Calculation of electric energy consumption.
- 2.8 Safety precaution to be observed while using electrical appliances.
- 2.9 Type of lighting-incandescent & fluorescent lamps.
- 2.10 Units of light-intensity & utility.
- 2.11 Energy conservation methods & programmes adapted in hotel.
- 2.12 Water & sanitary system.
- 2.13 Cold & hot water system used in hotel & catering industry.
- 2.14 Hardness in water, water softening-Base exchange method.
- 2.15 Flushing cisterns, water tap, traps, closets & pipes.

UNIT-III

- 3.1 Refrigeration & air conditioning.
- 3.2 Basic principle.
- 3.3 Boiling point & latent heat.
- 3.4 Compression type refrigeration system defrosting.
- 3.5 Types of refrigerant units.
- 3.6 Conditions for comfort unit of air conditioning.
- 3.7 Window & central air-conditioning.
- 3.8 Various parts in general-preventive maintenance.
- 3.9 Fire fighting systems.

- 3.10 Classes of fire & fire extinguishers.
- 3.11 Fire detectors.

UNIT-IV

- 4.1 Preventive & breakdown annual program.
- 4.2 Comparisons.
- 4.3 Contract maintenance.
- 4.4 Advantages & disadvantages.
- 4.5 Types of contracts.
 - a) Price rate
 - b) Lumpsum contract
 - c) Rate contract
 - d) Service contract
- 4.6 Waste disposal & pollution control
 - a) Disposal of waste-various methods
 - b) Sewage treatment plant
 - c) Water pollution
 - d) Sewage pollution
 - e) Ventilation air pollution & noise pollution related to hotel & catering industry

UNIT-V

- 5.1 Types of flooring, steps, corridor etc..
- 5.2 Types of wall finishes.
- 5.3 Types of furniture, care & maintenance.
- 5.4 Paints and polishes- types & its advantages.
- 5.5 Preparation of surfaces & application.

REFERENCE BOOKS

1. Practical maintenance and equipment for hoteliers, licences and caterers. D.C. Gladwell
2. Modern maintenance Eleno. J. Miller and Jerome. W. Blood D.B Tasa poxwala sons & co., mumbai
3. The management of maintenance and engineering systems in hospitality industry. Borseink. F.D, John weley.
4. Teach yourself- gas electricity Wilmay .C.W English language book society