

GUJARAT TECHNOLOGICAL UNIVERSITY**BHMCT - SEMESTER- V EXAMINATION – SUMMER 2024****Subject Code: 153306****Date:29-05-2024****Subject Name: Hotel Engineering & Maintenance****Time:02:30 PM TO 05:00 PM****Total Marks:70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

- Q.1** (a) What is preventive maintenance? **03**
 (b) Explain the purpose of a fire suppression system. **04**
 (c) Explain water softening, justify any one process in detail **07**
- Q.2** (a) Explain the function of a fire alarm system. **03**
 (b) Describe the role of a water softener in hotel operations. **04**
 (c) Explain control measures for Air pollution in hotels. **07**
- OR**
- (c) What measures can hotels take to enhance guest safety in terms of engineering? **07**
- Q.3** (a) Define HVAC. **03**
 (b) Mention the importance of proper maintenance in the hotel industry. **04**
 (c) Explain different types of maintenance with one example each. **07**
- OR**
- Q.3** (a) Why earthing is important for Electrical Appliances? **03**
 (b) Write about Thermal and Calorific Value. **04**
 (c) Describe 14 methods in Housekeeping department for energy conservation **07**
- Q.4** (a) Explain in brief Water Pollution. **03**
 (b) What is Swimming Pool maintenance? **04**
 (c) Calculate the electricity bill for February 2024 for the following appliances: Tariff: **07**
 Rs.5/- per unit
 (a) 100W bulb 5 nos. 8 hrs./day
 (b) 1.5 kW heater 2 nos. 4 hrs./day
 (c) 1.5 kW A.C. 1 no. 4 hrs./day
 (d) 40W tube light 5 nos. 8 hrs./day
- OR**
- Q.4** (a) Classify Fire. **03**
 (b) What are the main responsibilities of a maintenance technician in a hotel? **04**
 (c) Elaborate the scope and function of Hotel Engineering And Maintenance Department. **07**
- Q.5** (a) What does PPM stand for in hotel maintenance? **03**
 (b) What are the common types of lighting fixtures used in hotels? **04**
 (c) Narrate Energy Conservation Tips in Food and Beverage outlets. **07**
- OR**
- Q.5** (a) What is water closet system? **03**
 (b) Draw and explain Series & Parallel connection. **04**
 (c) Calculate the electricity bill for the month of November 2023 having the following electric loads: **07**
 60W bulbs 05 Nos. 6 hrs/day, 60W fans 10 Nos. 5 hrs/day,
 3 kW heater 02 Nos. 4 /hrs/day, 750W iron 02 Nos. 3 hrs/day
 6kW boiler 01 No. 3 hrs/day, Cost of electric energy is Rs.3/- per unit.
