Q.1. What is maintenance and scope of maintenance in a hotel? Describe.
   OR
   Name fuels used in hotel. What are the advantages and disadvantages of solid,
   liquid and gaseous fuels?
   (2+8=10)

Q.2. Describe LPG and draw a labelled diagram of Bunsen burner.
   OR
   What is fuse? What is its importance? Explain various types of fuses used in
   electric circuit?
   (2+3+5=10)

Q.3. What are different water distribution systems? Write about Zeolite process with
   diagram.
   OR
   Discuss the basic scientific principles behind refrigeration.
   (10)

Q.4. Classify fires. Write about different types of fire extinguishers.
   OR
   What are the types of air-conditioners? Explain the central air-conditioning
   system.
   (3+7=10)

Q.5. Write short notes on any two of the following:
   (a) Accident and Safety Management
   (b) Equipment Replacement Policy
   (c) Contract Maintenance
   (d) Walk-In Freezers
   (2x5=10)
Q.6. Explain in brief (any ten):
(a) B.T.U.  (b) Preventive maintenance  
(c) Flame spread  (d) Incandescent lamp  
(e) Insulators  (f) Escalators  
(g) Sullage  (h) Flash point  
(i) Class C Fire  (j) Humidification  
(k) r22  (l) Elbow

(10x1=10)

Q.7. (a) Explain any two types of pollution.  
(b) List the process of sewage treatment.

(5+5=10)

Q.8. List and explain various Audio visual equipment used in hotels.

(10)

Q.9. Calculate the electricity bill for the month of April 2011 having the following electric loads:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Units</th>
<th>Hours per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>60W bulbs</td>
<td>10 Nos.</td>
<td>6 hrs/day</td>
</tr>
<tr>
<td>60W fans</td>
<td>10 Nos.</td>
<td>5 hrs/day</td>
</tr>
<tr>
<td>3 KW heater</td>
<td>03 Nos.</td>
<td>4 hrs/day</td>
</tr>
<tr>
<td>750W iron</td>
<td>02 Nos.</td>
<td>3 hrs/day</td>
</tr>
<tr>
<td>6KW boiler</td>
<td>01 No.</td>
<td>3 hrs/day</td>
</tr>
</tbody>
</table>

Cost of electric energy is ₹3/- per unit.

(10)

Q.10. State true or false:
(a) Corrective maintenance is done after breakdown.  
(b) L.P.G. is a mixture of methane and butane.  
(c) Good or Ideal fuel has low ignition point.  
(d) Fuse can be used as switches.  
(e) Copper conductor is always tinned in V.I.R. cables.  
(f) The main disadvantage of hard water is bad taste.  
(g) Refrigerator cools the room.  
(h) Fire is an effect of fuel, heat and oxygen.  
(i) Switches are always connected with wire neutral.  
(j) C.P.U. stands for Control Processing Unit.

(10x1=10)

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