Q.1. Classify and prepare a table showing comparative study of solid, liquid and gaseous fuels with examples.  

(10)

Q.2. Define electric circuit. What are the various types of electric circuit? Describe.  

OR  
Explain the functioning of MCB. State reasons for placing switches on livewire side.  

(5+5=10)

Q.3. Explain the principles and functioning of Bunsen burner. List five properties of LPG.  

OR  
(a) What is contract? State essential requirements of a contract.  
(b) List advantages and dis-advantages of contract maintenance.  

(5+5=10)

Q.4. List three characteristics of hard water. What are the various ways to remove hardness of water?  

(3+7=10)

Q.5. Describe various classes of fires. Explain the methods of extinguishing fire.  

(5+5=10)

Q.6. Explain the stages of sewage treatment. What preventive measures can be adopted to control water pollution?  

OR  
Explain the factors which influence the replacement of equipment.  

(10)
Q.7. What are the important gadgets useful in the process of providing security solutions for hotel industry?  

OR  
What steps should be taken by hotel to prevent slip and falls?  

(10)

Q.8. Write short notes on any two of the following:  
(a) Care and maintenance of refrigerators  
(b) Sensors  
(c) Importance of maintenance department  
(d) Audio visual equipment  

(2x5=10)

Q.9. Explain in brief (any ten):  
(a) Manifold  
(b) Illumination  
(c) Modem  
(d) Escalator  
(e) Fire point  
(f) Refrigerant  
(g) Ampere  
(h) Defrosting  
(i) Ohm’s law  
(j) Dew point  
(k) Venturi effect  
(l) Diffused lighting  

(10x1=10)

Q.10. A Write the full form of the following:  
(i) DVR  
(ii) HSD  
(iii) VIR  
(iv) ETP  
(v) CFC  

B Fill in the blanks:  
(i) Temporary hardness of water is caused by _________ of calcium and magnesium.  
(ii) An ideal fuel has _________ ignition point.  
(iii) Light is measured in terms of _________.  
(iv) LPG is a mixture of methane and _________.  
(v) Anthracite is an example of _________ fuel.  

(5+5=10)