



Name : .....  
Roll No. : .....  
Invigilator's Signature : .....

**CS/BHMCT/SEM-5 (PART-B)/HM-505/2012**

**2012**

**FACILITY PLANNING – I**

Time Allotted : 3 Hours

Full Marks : 70

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

Assume reasonable value of additional data if required.

**GROUP – A**

**( Multiple Choice Type Questions )**

1. Choose the correct alternatives for any *ten* of the following :  
10 × 1 = 10
- i) Facilities foreman looks after
    - a) Repair
    - b) Fire protection
    - c) Building
    - d) Power.
  - ii) Responsibilities of the maintenance department is
    - a) carpentry
    - b) tinkering
    - c) tailoring
    - d) inspection.
  - iii) Convection is
    - a) Heat through solids
    - b) Heat from a hot object in straight rays
    - c) Heat through plastics
    - d) Heat through liquids.



- iv) Boiler applies to a device for generating
  - a) Electricity
  - b) Water boiling
  - c) Steam
  - d) None of these.
- v) The storage per ton space required for fuel of these in Metric oil
  - a) per ton space 26 m cube storage
  - b) per ton space 23 m cube storage
  - c) per ton space 11 m cube storage
  - d) none of these.
- vi) Class B fire is
  - a) Inflammable solids
  - b) Inflammable electrical equipment
  - c) Inflammable liquids
  - d) None of these.
- vii) Minimum lighting requirements in a restaurant should be
  - a) 7 Lumen/9.29 cm square
  - b) 10 Lumen/9.29 cm square
  - c) 15 Lumen/9.29cm square
  - d) 30 Lumen/9.29cm square.
- viii) Diffused light is
  - a) Glare free
  - b) Glare full
  - c) Glare Feckless
  - d) Glare feeble.
- ix) Watts is a measure of
  - a) Power
  - b) Flow of current
  - c) Measure of Resistance
  - d) Rate of flow of current.



- x) The fuses for lighting circuits should be
- a) 5 amps
  - b) 15 amps
  - c) 20 amps
  - d) 30 amps.
- xi) Distribution board is
- a) Divided into sub circuits
  - b) Divided into partial circuits
  - c) Divided into semi partial circuits
  - d) Divided into mini circuits.

**GROUP – B**

**( Short Answer Type Questions )**

Answer any *three* of the following.  $3 \times 5 = 15$

2. Explain the types of maintenance in a star hotel.
3. Explain Conduction, Convection and Radiation.
4. Explain the Advantages and disadvantages of Electric cooking.
5. Explain the remedial measures in case of a fire in the hotel.
6. Define the terms : Volts, Ampere, Ohm.



**GROUP – C**

**( Long Answer Type Questions )**

Answer any *three* of the following.  $3 \times 15 = 45$

7. State and discuss the parameters which determine the quality of water. What are the water conservation techniques in a big hotel ?  $7\frac{1}{2} + 7\frac{1}{2}$
8. What are the different types of electric motors used in the industry ? Describe the principle of working of slip ring induction motor.  $5 + 10$
9. What are the conditions of comfort in a building ? Describe the principle of operation of vapor compression system of air-conditioning.  $5 + 10$
10. State and discuss the factors and variables for the design of lighting system. State the methods of maintenance of lighting system highlighting the affects of maintenance on light outputs.  $7\frac{1}{2} + 7\frac{1}{2}$
11. State and discuss the precautions to be taken for fire prevention in a hotel. Also discuss fire detection techniques to achieve fire safety in a hotel.  $7\frac{1}{2} + 7\frac{1}{2}$
12. State and discuss the working principle of fuses and circuit breakers. With the help of neat diagram, explain how electric power is distributed through the distribution panel.  $7\frac{1}{2} + 7\frac{1}{2}$

