

Seat No. : \_\_\_\_\_

**NQ-101**

**December-2015**

**B.Sc., Sem.-I (Fire & Safety)**

**CC-103 : Fundamental of Fire**

**Time : 3 Hours]**

**[Max. Marks : 70**

1. (a) Write on a Class A and Class D fire. 7  
**OR**  
What is the fire triangle and tetra hydran of fire ? Differentiate between them.
- (b) Write on a Surface Fire, Deep seated fire. 7  
**OR**  
What is Starvation & Smothering ?
2. (a) Give the detail of flame spread in solid. 7  
**OR**  
Write on first, second, third stages of fire.
- (b) Write on grades of fire load & distribution of fire load. 7  
**OR**  
Write a short note on diffusion flame and blue flame (premix).
3. (a) Write an outline on staircase and internal wall. 7  
**OR**  
Write on the 9/11 incident of fire in the World Trade Centre.
- (b) 'Fire protection measures of high-rise building'. Write on this topic in your words. 7  
**OR**  
Write on stone, brick, R.C.C. of building material elements.
4. (a) Explain rate of rise type Heat-sensing fire detector. 7  
**OR**  
Discuss on the fixed temperature Heat detector and Ultra Violet (U/V) rays ionization type flame detector.
- (b) How detector helps to prevent the fire in industries and houses ? 7  
**OR**  
Draw the figure of Detector circuit.

5. Give the answer of following :

14

- (1) Fire produces the Flame & Heat in Class A fire. (True/False).
  - (2) Water is changing its physical state for ICE at \_\_\_\_\_ temperature.
  - (3) Fire gives black smoke and blue flame. (True/False)
  - (4) How much oxygen is available in nature ?
  - (5) Draw a figure of Stack effect.
  - (6) Sand is used to make a mortar. (True/False)
  - (7) Definition of Flash over.
  - (8) Definition of Ventilation.
  - (9) To protect from fire many industries develop their own private fire department for life safety. (True/False)
  - (10) Station officer gets sanctioned leave from D.F.O. (True/False)
  - (11) Chief Fire Officer is the key person between Fire department and Government. (True/False)
  - (12) Keeping and maintaining all firefighting equipment in working condition is the objective of fire maintenance department. (True/False)
  - (13) Combustible material is a food of fire as a fuel. (True/False)
  - (14) Formula of Fire load calculation.
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