

Register Number :

Name of the Candidate :

**7 2 7 1**

**DIPLOMA EXAMINATION, 2010**

**( FIRE AND SAFETY )**

**( PAPER - I )**

**110. FIRE ENGINEERING**

December ]

[ Time : 3 Hours

Maximum : 100 Marks

**PART – A** ( 3 × 20 = 60 )

*Answer any THREE full questions.*

*All questions carry equal marks.*

1. (a) State at least 10 main ignition hazards in an industry. (10)
- (b) List out four stages of fire and explain. (10)
2. (a) What is combustion, slow combustion, rapid combustion, and spontaneous combustion? Explain with example. (10)

**Turn Over**

- (b) Classification of hazardous areas with reference to electrical safety. (10)
3. (a) What are four methods of extinguishing fire and explain. (10)
- (b) Explain the properties of flammable materials. (10)
4. (a) Bring out the safety measures against static sparking. (10)
- (b) List out the various types of fire fighting appliances and explain with sketch. (10)
5. (a) Describe the measures to be followed for mitigating the chemical fire. (10)
- (b) Explain the precautions are to be taken while handling chemicals fire. (10)

**PART – B** ( 4 × 10 = 40 )

*Answer any FOUR full questions.*

*All questions carry equal marks.*

6. Write short notes on : (10)
- (a) Dust explosion.
- (b) Escape route.

- (c ) First aid for fire accident victims.
- (d) Deluge system.
7. (a) Describe fire and safety precautions to be followed in the ship yard. (5)
- (b) List out Do's and Don'ts when a fire breakout in ship yard. (5)
8. Explain the automatic sprinkler's construction.
9. What are the general requirements of fixed fire fighting installations?
10. Explain different types of foam systems.
11. List different types of fire extinguishers and explain the operation of any two type.
12. Explain the part played by Carbon dioxide in fire fighting. List merits and demerits of Carbon dioxide.