

Total No. of Questions: 6

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Enrollment No.....



Faculty of Engineering  
End Sem Examination May-2023

FT3EL02 Fire Safety Codes & Standardization

Programme: B.Tech.

Branch/Specialisation: FT

Duration: 3 Hrs.

Maximum Marks: 60

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

- Q.1 i. The following extinguisher is suitable for cotton or other textile fire- 1  
(a) Water (b) Soda acid (c) Foam (d) Dry chemicals
- ii. You should avoid using \_\_\_\_\_ fire extinguishers when extinguishing 1  
a fire in a confined space.  
(a) Dry powder fire extinguishers  
(b) Water fire extinguishers  
(c) Foam fire extinguishers  
(d) Wet chemical fire extinguishers
- iii. The fire assembly point can be best described as- 1  
(a) Where the fire extinguishers are stored  
(b) An area that has a high risk for fires to occur  
(c) An area where you are required to assemble in the event of a fire  
(d) An area you are required to avoid in the event of a fire
- iv. The first principle of good storage practice for chemicals is- 1  
(a) Limiting quantity (b) Concentration  
(c) Containment (d) Segregation
- v. When you see a fire on the worksite, what is the first thing you should 1  
do?  
(a) Sound the fire alarm  
(b) Tell you, manager  
(c) Try and put the fire out  
(d) Grab your tools and quickly exit the area

P.T.O.

- vi. Which of the following types of materials is responsible for fueling a Class A fire? **1**  
 (a) Oils that you typically cook with  
 (b) Flammable liquids  
 (c) Electrical Equipment  
 (d) Wood, plastic, paper, and other kinds of solid materials
- vii. When do you go to the fire assembly point? **1**  
 (a) When discussion about fire safety is taking place  
 (b) When the fire alarm goes off  
 (c) If you are the first one to see the fire  
 (d) When practicing using the different types of fire extinguishers
- viii. Who has the authority to pull the fire alarm after discovering a fire on the worksite? **1**  
 (a) Only the manager can activate the fire alarm  
 (b) Anyone who has seen a fire can activate the fire alarm  
 (c) Only the health and safety rep can activate the fire alarm  
 (d) Only the owner can activate the fire alarm
- ix. In the event of a fire, everyone is responsible for- **1**  
 (a) Informing the supervisor of what is happening  
 (b) Pulling the fire alarm if they see a fire  
 (c) Making sure everyone gets to the fire assembly point safely  
 (d) None of these
- x. What type of permit is needed in order to carry out work that could potentially result in a fire breaking out on the work site? **1**  
 (a) A fire permit (b) A hot permit  
 (c) A work permit (d) No permit is needed
- Q.2 i. Write the functional requirement for water tender type as per IS-948 in detail. **3**  
 ii. Explain the functional requirement of small foam tender as per Indian Standards. **7**
- OR iii. Write the installation of fire extinguishers in different occupancies as per IS 2190. **7**
- Q.3 i. What are the construction features and specification of salvage tender? **2**

- ii. Explain the design and construction features of rescue tenders as per IS specification. **8**
- OR iii. Write the functional requirement and specification DCP tender as per IS 10993. **8**
- Q.4 i. Explain smoke movement in high rise building. **3**  
 ii. What are the salient features about the provisions made by NBC remaining construction and design of building? **7**
- OR iii. What are the basic features with respect to fire safety and evaluation? Do you suggest for a shopping mall? **7**
- Q.5 i. Write in short IS-8758. **2**  
 ii. Explain the maintenance procedures for temporary structure. **8**
- OR iii. What are the criteria of deciding the locations of temporary structure? **8**
- Q.6 Attempt any two:  
 i. Write the various laws relating to the fire prevention and protection enforcement. **5**  
 ii. What are the municipal byelaws related to fire protection in educational building? **5**  
 iii. Discuss the salient features of municipal bye laws used in metro cities. **5**

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## Marking Scheme

### Fire Safety Codes & Standardization (T) - FT3EL02 (T)

Q.1	i.	The following extinguisher is suitable for cotton or other textile fire. <b>d) Dry chemical</b>	1
	ii	You should avoid using _____ fire extinguishers when extinguishing a fire in a confined space. <b>a) Dry Powder Fire Extinguishers</b>	1
	iii	The fire assembly point can be best described as: <b>c) An area where you are required to assemble in the event of a fire</b>	1
	iv	The first principle of good storage practice for chemicals is: <b>d) Segregation</b>	1
	v	When you see a fire on the worksite, what is the first thing you should do. <b>d) Sound the fire alarm</b>	1
	vi	Which of the following types of materials is responsible for fuelling a Class A fire? <b>d) Wood, plastic, paper, and other kinds of solid materials</b>	1
	vii	When do you go to the fire assembly point? <b>b) When the fire alarm goes off</b>	1
	viii	Who has the authority to pull the fire alarm after discovering a fire on the worksite? <b>b) Anyone who has seen a fire can activate the fire alarm</b>	1
	ix	In the event of a fire, everyone is responsible for: <b>b) Pulling the fire alarm if they see a fire</b>	1
	x	What type of permit is needed in order to carry out work that could potentially result in a fire breaking out on the work site? <b>b) A hot permit</b>	1
Q.2	i.	Write the functional requirement for water tender type As per IS-	3

948 in detail.

	ii.	Describe the material safety data sheet of LPG based on their flammability and reactivity data?	7
OR	iii.	Give the threshold limit values of Ammonia? Suggest first Aid/steps during leakage of Ammonia?	7
Q.3	i.	What are the construction features and specification of salvage tender? What are the construction features of salvage tender? 1 marks What are the specifications of salvage tender? 1 marks	2
	ii.	Explain the design and construction features of Rescue tenders as per IS specification.	8
OR	iii.	Write the functional requirement and specification DCP tender as per IS 10993. Write the functional requirement of DCP tender as per IS 10993. 4 marks Write the specification of DCP tender as per IS 10993. 4 marks	8
Q.4	i.	Explain Smoke movement in high rise building.	3
	ii.	What are the salient features about the provisions made by NBC remaining construction and design of building?	7
OR	iii.	What are the basic features with respect to fire safety and evaluation do you suggest for a Shopping mall?	7
Q.5	i.	Write in short IS-8758.	2
	ii.	Explain the maintenance procedures for temporary structure.	8
OR	iii.	What are the criteria of deciding the locations of temporary structure?	8
Q.6		Attempt any two:	
	i.	Write the various laws relating to the fire prevention and protection enforcement.	5
	ii.	What are the municipal byelaws related to fire protection in educational building?	5
	iii.	Discuss the salient features of municipal bye laws used in metro cities.	5

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