

MC-053

Seat No. _____

Second Year B. Sc. (Fire) Examination

April / May – 2003

**Fixed Fire Protection System &
Fire Service Management**

Time : 3 Hours]

[Total Marks : 70

- Instructions :**
- (1) All questions are **compulsory**.
 - (2) Figures to the **right** indicate full marks to the questions.
 - (3) Assume suitable additional data that may be **necessary**.

- 1 Explain the General Rules for the installations of Hydrant network as a fire protection system as per the relevant codes and standards **14**

OR

- 1 (a) Distinguish Internal Hydrant system to External Hydrant System. **5**
- (b) With the help of a suitable diagram, explain the construction and operational utility of Fire Pump House with an underground tank. **9**
- 2 (a) With the help of a line diagram explain the construction and functions of a Sprinkler system. **5**
- (b) Name and briefly explain the different types of Sprinkler Head in use. **3**
- (c) Give the criteria of spacing between sprinkler heads for light hazard, ordinary hazard and high hazard category. **6**

OR

- 2 (a) Briefly explain the difference between medium velocity water sprayer and high velocity water sprayer system. 4
- (b) Explain in detail the various steps of design you have to consider while designing a medium velocity water sprayer system as a Fire Protection System. 10
- 3 Explain the difference between Dry pilot Deluge valve and wet pilot deluge valve with the help of a suitable neat sketch. Explain the functioning of wet pilot Deluge System. 14

OR

- 3 (a) Describe the salient features of a Fire Alarm System you may consider appropriate for a high rise building having a control room at the ground level. 7
- (b) Briefly explain the advantages and disadvantages of Carbon dioxide Total Flooding System. 7
- 4 As a senior officer-in-charge of an operational Fire Protection Organisation of an Industry, you have asked to prepare the list of Duties and responsibilities of : 14
- (i) Officer (Fire)
- (ii) Manager (Fire).

OR

- 4 Management is defined as, to plan to organize, to command to coordinate and to control'. – Justify. 14
- 5 (a) Briefly explain the duties and good qualities of an efficient Fire Service Trainer. 9

- (b) Give your opinion on the need of instructional skill to Fire Service Officers. **5**

OR

- 5** (a) What does fiscal Management in Fire Service refers to ? **7**
- (b) Give your opinion on a general view that Fire Service is not a profit oriented organisation. **7**
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