MC–053
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 14
   Hydrant network as a fire protection system as per the relevant codes and standards

OR

1  (a) Distinguish Internal Hydrant system to External 5
   Hydrant System.
   (b) With the help of a suitable diagram, explain the 9
       construction and operational utility of Fire Pump
       House with an underground tank.

2  (a) With the help of a line diagram explain the 5
    construction and functions of a Sprinkler system.
    (b) Name and briefly explain the different types of 3
        Sprinkler Head in use.
    (c) Give the criteria of spacing between sprinkler heads 6
        for light hazard, ordinary hazard and high hazard
        category.

OR

MC-053] 1 [Contd...
2 (a) Briefly explain the difference between medium velocity water sprayer and high velocity water sprayer system.

(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.

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.

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.

(b) Briefly explain the advantages and disadvantages of Carbon dioxide Total Flooding System.

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:

(i) Officer (Fire)

(ii) Manager (Fire).

OR

4 Management is defined as, to plan to organize, to command to coordinate and to control'. – Justify.

5 (a) Briefly explain the duties and good quantities of an efficient Fire Service Trainer.
(b) Give your opinion on the need of instructional skill to Fire Service Officers.

OR

(a) What does fiscal Management in Fire Service refers to?

(b) Give your opinion on a general view that Fire Service is not a profit oriented organisation.