

**DIPLOMA IN FIRE SAFETY MANAGEMENT  
(DFSTYM)**

**Term-End Examination**

**June, 2013**

**00022**

**BSE-045 : PUMP OPERATION AND  
DISTRIBUTION OF WATER**

*Time : 3 hours*

*Maximum Marks : 75*

*Note : Support with sketches wherever applicable.  
Attempt all questions.*

**GROUP-A**

1. Tick on the right answers : 5x2=10
- (a) Crash Tenders are commonly used at :
- (i) Sea Ports
  - (ii) State Fire Services
  - (iii) Airports
- (b) Double stage centrifugal pump gives :
- (i) Less pressure
  - (ii) More pressure
  - (iii) Equal pressure than the single stage centrifugal pump.

- (c) Water Relay is commonly required for :
  - (i) To carry huge quantity of water.
  - (ii) To carry water from distance.
  - (iii) To save manpower.
- (d) Diesel engine driven Fire Pumps are :
  - (i) More reliable source of water supply.
  - (ii) Less reliable source of water supply than electrically driver pump.
  - (iii) Equally reliable source of water supply than electrically driven pump.
- (e) Water Tenders are generally used :
  - (i) To fight "A" class fire.
  - (ii) To fight "B" class fire.
  - (iii) To fight electrical equipment fire.

## GROUP-B

2. Fill in the blanks : 5x2=10

- (a) Ejector pump works on \_\_\_\_\_ principle.
- (b) Reciprocating pump require \_\_\_\_\_ maintenance.
- (c) In Water Relay System, the weakest pump is place at \_\_\_\_\_.
- (d) Under ground water tank may require \_\_\_\_\_ system.
- (e) Water Tender requires \_\_\_\_\_ system to throw water.

## GROUP-C

3. Write short notes on *any seven* : 7x5=35

- (a) Foam Tender
- (b) Centrifugal Pump
- (c) Open Circuit Water Relay System
- (d) Ejector Primer
- (e) Over Head Water Storage Tank
- (f) Water Tender
- (g) Power Take-off system in Fire Tender
- (h) Rescue Equipments in Emergency Tender.
- (i) Reciprocating Primers.

## GROUP-D

4. Answer *any two* : 2x10=20

- (a) Explain in detail the working of a Water Ring Primer with neat diagram.
  - (b) Give the list of emergency items normally stored in an Emergency Tender.
  - (c) What are the points to be considered for a reliable water supply system for fire fighting ?
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