

00826

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

Term-End Examination

December, 2011

BSE-041 : BASIC OF FIRE AND FIRE SCIENCE

Time : 3 hours

Maximum Marks : 75

Note : Attempt all questions.

1. Write True or False against each statement. $5 \times 1.5 = 7.5$

- (a) Critical Temperature is the maximum temperature above which a gas can not be liquified by pressure alone.
- (b) Earthing is provided to ensure dissipation of static charge.
- (c) The water type fire extinguisher is best suitable for oil fires.
- (d) The formula for converting degrees Fahrenheit to centigrade is

$$^{\circ}\text{C} = (^{\circ}\text{F} - 32) \times \frac{9}{5}$$

- (e) Water is the standard to calculate the specific gravity of any matter.

2. Fill in the Blanks :

5x1.5=7.5

- (a) _____ is the lowest temperature at which a substance gives off sufficient inflammable vapours to produce a momentary flash on application of naked fire.
- (b) BCF stands for _____.
- (c) _____ fire extinguisher is best suitable for oil fires.
- (d) The rate of flow of electricity is measured in unit called _____.
- (e) Vapour density is the ratio of the weight of a given volume of a gas or vapour to the weight of a volume of equal _____.

3. Write short notes on *any six* :

6x6=36

- (a) Limits of Flammability.
- (b) Fire Point and Ignition Temperature
- (c) Earthing and Bonding.
- (d) Fire hazards of smoke and its control
- (e) Fire Detectors
- (f) Boyles Law and Charles law.
- (g) Fire Extinguishing agents.
- (h) LPG and action in case of leakage.

4. Answer *any two* of the following :

2x12=24

- (a) (i) What is fire ?
 - (ii) What are the various methods of fire extinction.
 - (b) Explain in detail the various fixed fire fighting installations provided in a building.
 - (c) Name the various types of fire extinguishers and their suitability on each class of fire.
 - (d) Explain the causes of fires in transformers and their preventive measures.
-