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**DIPLOMA IN FIRE SAFETY**

**Term-End Examination**

**June, 2010**

**BSEI-030 : HAZARD AND RISK ASSESSMENT**

*Time : 3 hours*

*Maximum Marks : 100*

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*Note : Q.No.1 (Part-A,B and C) all are compulsory Q.No.2 do any 7 out of 10 and Q.No.3 do any 03 out of 5 questions.*

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**PART-A**

Fill in the blanks :

**10x1=10**

1. (a) Fire accident may cause of \_\_\_\_\_.
- (b) To avoid loss of life and property \_\_\_\_\_ are provided.
- (c) \_\_\_\_\_ notice should be displayed in all high fire risk area.
- (d) Petrol, Kerosine, Varnishes all are \_\_\_\_\_ liquids.
- (e) Materials like coir, Jute, cotton, coal are liable to \_\_\_\_\_.
- (f) On discovery of a fire, the important point is to sound the \_\_\_\_\_.

- (g) A small fire may be tackled with the help of a \_\_\_\_\_ .
- (h) Proceed to the \_\_\_\_\_ as outlined in the emergency action plan.
- (i) In case the fire is not extinguished, then \_\_\_\_\_ will be initiated immediately.
- (j) In case, the start of fire witnessed should be reported immediately to \_\_\_\_\_.

**PART-B**

Tick (✓/×) the following as T/F

**10x1=10**

1. (a) Materials to be used in the construction of the appliances should be light with strength and durable. ( )
- (b) Timber shall not be used in manufacturing of water tenders. ( )
- (c) Tenders are checked and maintained after return from fire. ( )
- (d) A first-aid hose reel shall be provided on the appliances or tenders. ( )
- (e) There should be three handlines on either sides of the appliances. ( )
- (f) The foam monitor should be self-aspiring type. ( )
- (g) Riot control vehicle is used by Police and Para-Military forces. ( )
- (h) All the windows and doors of the tenders must not have safety glasses. ( )
- (i) The Sparg Pipe and road watering pipe may be provided in front side of the water tenders to protect the tyres. ( )
- (j) Hose-reel-hose is not fitted on a hollow rotation shaft to the centre of which water is fed. ( )

**PART-C**

Choose the *correct* answers :

8x1=8

1. (a) The minimum diameter of suction Inlet of a pump is :
- (i) 100 mm            (ii) 125 mm  
(iii) 150 mm        (iv) 175 mm
- (b) The capacity of a water tank mounted on the chasis is :
- (i) 6000 L            (ii) 6200 L  
(iii) 6500 L        (iv) 6800 L
- (c) The length of first aid hose reel on the appliances is :
- (i) 58 m              (ii) 62 m  
(iii) 56 m            (iv) 60 m
- (d) The appliances must have minimum liters of foam compound for foam production :
- (i) 750 L              (ii) 800 L  
(iii) 850 L            (iv) 700 L
- (e) A minimum output of water-foam solution through two hand lines is :
- (i) 400 L              (ii) 500 L  
(iii) 450 L            (iv) 550 L
- (f) If a co-worker catches on fire, he should be saved by :
- (i) Water              (ii) Blanket  
(iii) Sand              (iv) None

- (g) Which of the following is not a Natural calamities :
- (i) Flood                      (ii) Earthquake  
(iii) Tsunami                  (iv) Strikes
- (h) Which one of the following is not an Industrial types :
- (i) Gas leak                      (ii) Fire  
(iii) Explosion                  (iv) Heavy rain

Attempt *any* 7 questions out of 10.                      7x6=42

2. (a) What is Hazard ? How will you minimize the Hazards ?
- (b) What is the aim of Fire RISK Assessment ? What factors are considered in carrying out its assessment ?
- (c) How will you escape yourself and others from the burning building ?
- (d) What action will you take if some one catches on fire ? Also mention the precautions taken by you in case of smoke ?
- (e) What different responsibilities should a security supervisor on duty perform ?
- (f) Which different signals of evacuation are used in case of fire and who others are also involved in the evacuation drill ?
- (g) Differentiate between the responsibilities of security officer and medical officer ?

- (h) Write names of different emergencies we come across in our day to day life ? How can emergency procedures be handled ?
- (i) What action one should take in case of fire emergency ? Write a short note.
- (j) What is a water tender comprises of ? Write its essential features.

Do *any three* questions out of *five*. 10x3=30

- 3.
- (a) What traits are required to deal with emergencies ?
  - (b) In the design of foam and construction, write the role of 'Power Take Off' and 'Vehicle Drive'. Also, write about the type A, type B and type C of water tenders ?
  - (c) What are Rapid Intervention Vehicles, Riot Control Vehicles and Truck Fire Fighting Dry Chemical Powder ?
  - (d) Write any ten points on general requirements and capacity of tenders.
  - (e) What are the main causes of Industrial Fire ? Write each of them in detail.
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