

B.Sc. Semester-4 Examination  
(Fire & Safety)  
CC - Fire Prevention & Protection

Time : 2-30 Hours]

April-2023

[Max. Marks : 70

Q.No1(a) In what way the properties of building material affect fire fighting and describe the fire properties of timber, Bricks , concrete , steel

Q.No1(b) In how many types the safety appraisal is divided explain quantitative and qualitative appraisal ,,write short notes on any three

1. Safety audit, safety sampling, safety survey, JSA

OR

Q.1(a) Describe the role of Fire officer working in refinery with respect to fire prevention and protection in the plant and suggest a vessel entry work permit proforma.

Q.No1(b) What is active and passive fire protection systems ,give 4 names each in passive and active and high light the importance of house keeping ,general precautions and essentials of good house keeping.

Q.No2(a) As per petroleum act define following terms

Petroleum ,petroleum class A, petroleum class B, petroleum class C , flash point, import of petroleum.transport petroleum,

Q.No2(b) What are the general provisions in gas cylinder rules 1981 related to filling, possession, import, and transport of cylinders and what are the importance of safety relief devices and marking on cylinders.

OR

Q.No2(a) Describe fixed foam systems on floating roof and fixed roof tanks and how many numbers of foam out lets are provided on 20 mtr diatank. What is pit fire and sewer fire and how to extinguish such fires.

Q.No2(b) Mention the general and job requirements of a fire fighting personnel and what are the precautions /guide lines to be adopted to control LPG leaks and fires

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Q.No3(a) what are the hazards of fire propagation, describe in details in how many ways fire can spread.

Q.No3(b) What is stability, insulation and integrity of building. Explain flash over and stack effect.

OR

Q.No3(a) What is compartmentation and compartmentalization and what are the factors to be considered for compartmentation.

Q.No3(b) Give importance of fire resistance/fire proofing material and explain properties of fire proof RCC, mastics, fibre glass. What is the difference between Duct and a damper

Q.No4(a) List out the documents required to be submitted for fire insurance claim.

Q.No4(b) Why fire insurance cover is needed, what are other insurance covers, and in order to claim damages, what are the expenses covered and perils covered.

OR

Q.No4(a) By paying extra premium which perils and expenses can be covered in fire policy. How fire loss management can be done in industry.

Q.No.4(b) What are the losses and expenses not covered in insurance policy, perils not covered and properties not covered. What do you understand by sequence of risk control.

Q.No5 MCQ Each carries one mark

1. A brick wall should have following property

Integrity, insulation, stability, all three

2. This is not an ingredient in making of mortar

clay, lime, sand, steel bar

3. For removal of debris the maximum claim can be

1%, 2%, 3%, 4%

4. In how many copies the safety work permit is printed

single, double, three, four

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5. The fire resistance of timber does not depend on this factor

Density of timber, thickness of timber, cross sectional area, expansion of timber

6. It is not true in case of aluminium

easy to handle, resistance to corrosion, Easy to work, low strength to weight ratio

7. What is the full form of SREDIM -----,-----,-----,-----,-----.

8. Where is the head office of CCE located

Delhi, Kanpur, Nagpur, Madras

9. What is full form of CCE chief controller of electricity, chief checker of explosives,

Chief controller of explosives

10. It is a written document called PTW, what is its full form -----.

11. In safety sampling normally the area is inspected for

20 minutes, 30 min, 40 min, 1 hour

12. Which OISD standard provides guide lines on fire fighting equipments and appliances in oil sector.

OISD 113, OISD 115, OISD 119, OISD 120

13. The expansion of copper strip is same as of

bronze, aluminium, glass, Iron

14. Architect fee can be claimed up to

2%, 3%, 4%, 5%

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