0512E872

B.Sc (F&S) Sem.-3 (NEP) Examination DSC-C-231-T

Fire Protection System

Time: 2-00 Hours]

December-2024

[Max. Marks: 50

Note: Each question carries five marks.

Q.No1 (a). Explain active and passive fire protection system and give 4 names in each system . Give classification of passive fire protection system.

Q.No.1(b).Describe function of fire proof door and technical requirement of fire proof door.

OR

Q.No1.(a)According to type of fuel and fire classification indicate a list of suitable fire extinguishers.

Q.No1(b).What is hose reel hose ,why it is called 1^{st} aid fire fighting appliance,Give its complete specification along with sketch

Q.No2(a).Briefly describe Hydrant system and write short note on Fire pump house and electric feed to fire pump.

Q.No.2(b). How many types of hydrant system are there for high rise buildings ,explain wet riser system and basic requirement of wet riser.

OR

Q.No2(a). Explain Radiographic test and electrical/holiday test for under ground hydrant line.

Q.No2(b) .What is the difference between Booster pump and Jockey pump .Explain working of Jockey pump.

 $Q.No3(a).how\ many\ types\ of\ sprinkler\ system\ are\ there\ , explain\ wet\ sprinkler\ system\ . What is\ alternate\ system.$

Q.No.3(b)What is temperature rating of sprinkler bulb, how sprinkler works . Give temperature rating of red and orange , bulb.

OR

Q.No3(a)Describe working principle of wet alarm valve with the help of diagram.

Q.No3(b)Explain in details the working of water spray system, and its use .

Q.No.4(a).What are the most common types of Gaseous system ,write names. Explain in details ${\sf Co2}$ total flooding system

Q.No4(b). What is Inergen system, advantages and disadvantages of inergen.

OR

Q.No4(a). Explain total flooding system of DCP and its application.

Q.No4(b). What are the properties of FM 200 ,use of FM200.It is a replacement of which gas.?

Q.No 5. MCQ attempt any 10, each carries one mark.

a.FM 200 requires how much concentration to extinguish fire.

5%, 6%, 7%, 10%,

b.In IG 541 gas the composition is

Nitrogen & argon, Nitrogen + Argon + Co, Nitrogen + argon + Co2. None

c.FM 200 removes which energy to extinguish fire

fuel energy, heat energy, kinetic energy, potential energy

d.NFPA code for CO2 system is code 12, code 13, code 14, code 15

e.NOVEC gas requires how much concentration to extinguish fire

1%, 2%, 3%, 4%,

f.Oil terminal depot falls in which category of hazard structure

light hazard, ord hazard, HHA, HHB

g. The size of under ground hydrant line shall not be less than

80mm, 100mm, 150mm, 200mm

h.The NRV fitted on top of riser is called

new return valve, negative return valve, non return valve, non reset valve

i.Drencher nozzles are having ----- K factor large, medium, small, none

i. Which is not true for Co2 gas

clean agent, heavier than air, conductor of electricity, none

k.The MAP powder is known as

micro ammonium phosphate, mono ammonium phosphate, mono aluminium

phosphate, mono ammoniac phosphate,

I. KHCO3 powder is also known as

super K, Monnex, Purple K, Red K