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1105E181

Candidate's Seat No : _____

BSc Sem.-5 (F&S) Examination

CC-1

Special Fire Hazards

May 2022

Time : 2-00 Hours]

[Max. Marks : 50

Section – 1 Attempt any three of the following questions. Each question carries 14 marks.

Q.No1(a) Describe basic fire fighting strategy in high rise building and what are the challenges /difficulties encountered,

b) In how many categories the special structure has been divided , give 4 names of structure in each group.

Q.No2(a) Explain internal hazard, Personal hazard, and exposure hazard in case of high rise building.

(b) Explain in details the Principle of life safety and its objectives.

Q.No.3(a) Name the parts of an aircraft , various material used in construction and thereby explain use of aluminium alloys and magnesium and its alloys

(b) what are the types of fuels used in aircraft ,explain both petrol and kerosene and in category of petrol explain Av gas.

Q.no4(a) Describe any 2 fires Engine fire, wheel fire, cabin fire , vapour cloud explosion

(b) what are the precautions to be observed while rescue from civil air craft and how to approach aircraft when the engine are running.

Q.No.5(a) Write short note on any two High pressure, Hydrogen sulphide, Structural damage by collision

(b) What are the different methods used to transport workers to off shore, which is most common way, and write down names of 9 elements of personal responsibility for safety.

Q.No6(a) How many types of power generation stations are there, explain thermal power station, with the help of diagram, mention advantages and disadvantages of thermal power plant.

(b). Describe hydro electric power station with the help of schematic diagram and advantages of hydro power station.

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Q.No7(a) Explain with the help of figure the working principal of nuclear power plant ,its advantages and disadvantages.

(b) Write short notes on any 2 flame retardant cables, fire detection, Boiler fire and explosion, contact with hazardous chemicals

Q.No8(a) What is abandonment , write down the list of group survival and personal survival equipment.

b) List out the components of life raft and launching procedure for a throwable life raft.

Section 2 MCQ..Attempt any 8 questions of 1 mark each.

a. In which form coal is used in thermal power plant

chips, blocks, flakes, pulverized

b. Which is most environment polluting power generation plant

coal, hydro, nuclear, gas based,

c. Which is most desirable strategy to minimise impact of electrical fire

detection, suppression, compartmentation, prevention

d. In nuclear power plant the radio active source goes under which reaction

fusion, fission, chemical, thermal

e. Which is not true in case of thermal power plant

running cost is less than hydro electric plant

coal is cheaper

it requires less space as compared to hydro electric plant

it pollutes the atmosphere.

f. Cinema building falls in which category of special hazard structure

cat1, cat 2, cat 3, cat 4

g. Which NFPA code deals with life safety in high rise buildings

100, 101, 102, 103,

h. Involving aircraft accident the color of tag used for delayed care

red, yellow, black, brown

i. The area where air craft goes for servicing is called

Terminal, tower, runway, hangar.

j. This metal is easy to ignite

aluminium alloy, stainless steel, titanium alloy, none

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