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Candidate's Seat No : \_\_\_\_\_

B.Sc. (Fire & S.) (NEP) Sem.-5 Examination

DSC-C-351

Special Fire Hazards

November-2025

Time : 2-00 Hours]

[Max. Marks : 50

Q.No1(a) In cave temple of Ellora, what was found about the safety harness Used in ancient times aviation. Compare with present days Safety belts.

Q.No1(b) Compare seating capacity of Pushpak viman with modern day Air bus 380 and other jet planes, :

OR

Q.No.1(a) Explain Mantrika, Tantrika, Yantrika and types of metals used in ancient times,

Q.No.1(b) Explain about Pushpak viman as given in Sundarkand, what is the meaning of Adrishya (invisible), were such planes existed during ancient times.

Q.No2(a) Describe basic fire fighting strategy in high rise building and what are the challenges /difficulties encountered,

Q.No2(b) In how many categories the special structure has been divided ,  
writedown 4 names of structure in each group.

OR

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

Q.No.2(b) Name the parts of an aircraft , various material used in construction  
and thereby explain use of aluminium alloys and magnesium and its alloys

Q.no3(a) Describe any 2 fires

Engine fire, wheel fire, cabin fire , vapour cloud explosion.

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Q.No3(b) what are the precautions to be observed while rescue from civil air craft and how to approach aircraft when the engine are running.

OR

Q.No.3(a) Write short note on any three- High pressure, Hydrogen sulphide, Structural damage by collision, confined spaces, noise

(b) What are the different methods used to transport workers to off shore, which is most common way, and write down precautions to be taken while boarding a life boat.

Q.No4(a) How many types of power generation stations are there, explain thermal power station, with the help of diagram, mention its advantages and disadvantages of thermal power plant.

Q.No4(b) Describe hydro electric power station with the help of schematic diagram and advantages of hydro power station.

OR

Q.No4(a) What is abandonment, write down the list of group survival and personal survival equipment.

Q.No4(b) List out the components of life raft and launching procedure for a throwable life raft.

Question No.5. MCQ. Attempt any 10 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

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- 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 elect 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 minor care  
red, yellow, black, green
- i. The area where air craft goes for servicing is called  
Terminal, tower, runway, hangar.
- j. This metal is difficult to ignite as well as difficult to extinguish  
aluminium alloy, stainless steel, titanium alloy, none
- k. What is full form of MMMF -----
- l. AVTag fuel is also known as JetA/jetB
- m. The life boat must be strong to fall from height of  
3mtrs, 4 mtrs, 5 mtrs, 6 mtrs

