Name: Class: 6° year Date:

# WRITTEN TEST -B-

## A- Choose the correct sentence

1- **a**. A complete fire protection system on modern aircraft, and on many older aircraft, includes a fire detection system and a fire extinguishing system. ☐

**b**. A complete fire protection system on modern aircraft, and on many older aircraft, includes a fire detection system and carbon monoxide detectors. ☐

2- **a**. Two common types of extinguishers used are light refraction and ionization. ☐

**b**. Two common types of smoke detectors used are light refraction and ionization. ☐

3- **a**. An ionization type smoke detector generates an alarm signal (both horn and indicator) ☐

**b**. A light refraction type smoke detector generates an alarm signal (both horn and indicator) ☐

## B- Match the classes of fires with the corresponding material each of them involves

1. **Class A—** fires involving flammable liquids ☐
2. **Class B—** fires involving combustible metals ☐
3. **Class C—** fires involving energized electrical equipment ☐

fires involving ordinary combustible materials ☐

## C- Read the following text and answer

### Installed Fire Extinguishing Systems

Transport aircraft have fixed fire extinguishing systems installed in:

1. Turbine engine compartments
2. APU compartments
3. Cargo and baggage compartments
4. Lavatories

#### $CO_2$ Fire Extinguishing Systems

Older aircraft with reciprocating engines used $CO_2$ as an extinguishing agent, but all newer aircraft designs with turbine engines use Halon or equivalent extinguishing agent, such as halocarbon clean agents.

#### Halogenated Hydrocarbons Fire Extinguishing Systems

The fixed fire extinguisher systems used in most engine fire and cargo compartment fire protection systems are designed to dilute the atmosphere with an inert agent that does not support combustion. Many systems use perforated tubing or discharge nozzles to distribute the extinguishing agent. High rate of discharge (HRD) systems use open-end tubes to deliver a quantity of extinguishing agent in 1 to 2 seconds.

The most common extinguishing agent still used today is Halon 1301 because of its effective firefighting capability and relatively low toxicity (UL classification Group 6). Noncorrosive Halon 1301 does not affect the material it contacts and requires no cleanup when discharged. Halon 1301 is the current extinguishing agent for commercial aircraft but a replacement is under development. Halon 1301 cannot be produced anymore because it depletes the ozone layer. Halon 1301 will be used until a suitable replacement is developed. Some military aircraft use HCL-125 and the Federal Aviation Administration (FAA) is testing HCL-125 for use in commercial aircraft.

1- Why will Halon 1301 be no longer produced?

2- Mention the name of a product similar to Halon.

3- Underline a sentence with a modal verb in passive voice.

4- Translate