Section - 2

Ans ① turboprop engine :-

① the turbine develops power to run the compressor and propeller.

② the turbine propeller and jet produced by the nozzle give forward motion to the aircraft.

③ By using diffuser before the compressor, overall efficiency of the turboprop is improved.

④ In diffuser, pressure of gases raise due to conversion of kinetic energy of the incomming air (equal to aircraft velocity) into pressure energy this type of compression is known as Ram effect

② Ramjet engine :-

① A fan at the front sucks the cold air into the engine and forces it through the inlet. this slows down the air by about 60 percent.

② A second fand called a compressure squeezes the air (increase its pressure) by about (eight times and this dramatically increases its temperature.

③ kerosene (liquid fuel) is squirted into the engine from a fuel tank in the plane wings.

④ the hot exhaust gases exit the engine through a tapering exhaust nozzle just as water squeezed through a narrow pipe accelerates dramatically into a fast jet

c) Solid propellant rocket engine :- ~~Solid rocket its~~ rocket engines

Carry their our oxidizer for burning of fuel as they are non-air breathing engine.

② Rocket propulsion is realised by the thrust produced by Combustion products leaving exits nozzle.

③ It has injection system for fuel and oxidizer followed by Combustion chamber and exit nozzle.

④ Rocket gets desired thrust by the reaction available from the nozzle stream.

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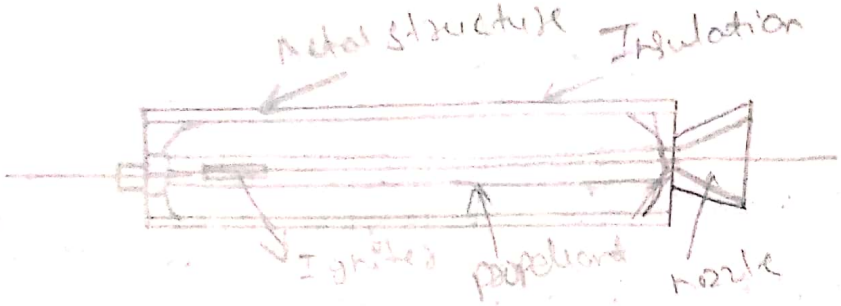

Rocket engine.