

### UNIT-V Jet Propulsion

#### Fill in the Blanks (10)

1. Jet propulsion works on \_\_\_\_\_ law of motion.  
**Answer:** Newton's Third
2. In a jet engine, thrust is produced by the high-speed \_\_\_\_\_ gases.  
**Answer:** Exhaust
3. The device used to compress incoming air is called a \_\_\_\_\_.  
**Answer:** Compressor
4. Fuel is burned in the \_\_\_\_\_ chamber of a jet engine.  
**Answer:** Combustion
5. The hot gases expand through a \_\_\_\_\_ to produce thrust.  
**Answer:** Nozzle
6. The force that propels an aircraft forward is called \_\_\_\_\_.  
**Answer:** Thrust
7. The working principle of jet propulsion is based on conservation of \_\_\_\_\_.  
**Answer:** Momentum
8. A turbojet engine consists of a compressor, combustion chamber, turbine, and \_\_\_\_\_.  
**Answer:** Nozzle
9. The turbine in a jet engine drives the \_\_\_\_\_.  
**Answer:** Compressor
10. Jet propulsion is mainly used in \_\_\_\_\_ aircraft.  
**Answer:** Aircraft

#### Multiple Choice Questions (10)

1. Jet propulsion is based on:
  - A) Newton's First Law
  - B) Newton's Second Law
  - C) Newton's Third Law
  - D) Law of Gravitation

**Answer:** C) Newton's Third Law

2. The forward force produced by a jet engine is called:
  - A) Drag
  - B) Lift
  - C) Thrust
  - D) Weight

**Answer:** C) Thrust

3. Which component compresses the incoming air?
  - A) Turbine
  - B) Nozzle
  - C) Compressor
  - D) Diffuser

**Answer:** C) Compressor

4. Fuel combustion takes place in the:
  - A) Turbine
5.
  - B) Compressor
  - C) Combustion Chamber
  - D) Diffuser

**Answer:** C) Combustion Chamber

6. The hot gases finally leave through the:
  - A) Turbine
  - B) Nozzle

- C) Compressor
- D) Diffuser

**Answer:** B) Nozzle

7. Which of the following is a jet propulsion engine?

- A) Turbojet
- B) Turbofan
- C) Ramjet
- D) All of the above

**Answer:** D) All of the above

8. The turbine in a jet engine is driven by:

- A) Water
- B) Steam
- C) Hot gases
- D) Air only

**Answer:** C) Hot gases

9. The SI unit of thrust is:

- A) Joule
- B) Newton
- C) Watt
- D) Pascal

**Answer:** B) Newton

10. Which engine has no moving compressor or turbine parts?

- A) Turbojet
- B) Turbofan
- C) Ramjet
- D) Turboprop

**Answer:** C) Ramjet