



40518



12. a) Name the various types of drags and briefly explain the methods to minimise the drags in an aircraft.

(OR)

- b) By deriving suitable expression discuss the relationship of the pressure, density and temperature at various altitudes.

13. a) Write down the classification of flight vehicles and briefly explain the important features.

(OR)

- b) Explain in detail with sketches about power assisted and power operated control mechanism.

14. a) Write short notes on any four materials used in aircraft structures, also discuss their advantages.

(OR)

- b) Draw the stress-strain diagram and define the terms proportional limit, yield stress and ultimate tensile stress. How the stress-strain diagram of aluminium and steel differs ?

15. a) i) Write the classification of rockets. (6)

- ii) With aid of neat sketch explain the operation of Liquid Propellant Rocket engine. (7)

(OR)

- b) Write down the classification of aircraft engines. Explain any one engine with aid of a diagram. List down the comparison of different engines.

PART - C

(1×15=15 Marks)

16. a) Draw three view diagram of a subsonic aircraft and explain its parts and state their functions.

(OR)

- b) Explain in detail the wing construction and the function of various structural components on aircraft wing.

11/11/2020