

- Q.29 Explain seat ejection system.
- Q.30 What are the different types of lubrication systems?
- Q.31 What do you mean by flame proofing?
- Q.32 What are the principles of automatic control?
- Q.33 How is testing of different types of fuels done?
- Q.34 What type of hose pipes are used in hydraulic systems?
- Q.35 Explain anti-skid system?

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Explain and compare the working of hydraulic and pneumatic systems of an aircraft with example.
- Q.37 Explain a) Flow Dividers b) Heat Loads c) Capsules and bellows.
- Q.38 Describe emergency exit system. How are windows are emergency exits designed?

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Sub.: Aircraft Systems

Time : 3Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 The equipment nearest to elevator is
- a) Accumulator b) Reservoir
 - c) Actuator d) Flow divider
- Q.2 A one-way valve that lets air into the reservoir of a compressor, but doesn't let it out, is a
- a) Check valve b) Receiver valve
 - c) Control valve d) Three way valve
- Q.3 Servo motor has ____ terminals?
- a) Three b) Four
 - c) Two d) One
- Q.4 The most common hydraulic fluid is
- a) Mineral oil b) Synthetic fluid
 - c) Water d) Gel
- Q.5 The power source in the pneumatic system is ____
- a) Muffler b) Compressor
 - c) Air receiver d) Valve

- Q.6 The cabin pressure is regulated by the _____ valve.
a) Outflow b) Inflow
c) Downward d) Upward
- Q.7 In air crafts, the cabin altitude during flight is kept above sea level so as to reduce stress on the pressurized part of the _____
a) Engines b) Wings
c) Fuselage d) Tail
- Q.8 What is the ambient air pressure at 40,000 feet?
a) 2 bar b) 0.2 bar
c) 20 bar d) 0.02 bar
- Q.9 Landing gear was previously referred to as _____
a) Alighting gear b) Resting gear
c) Moving gear d) Rolling gear
- Q.10 Which of the following is the most important criterion in selecting an appropriate fuel to power an aircraft?
a) Cost b) Density
c) Specific energy d) Efficiency

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Name the equipment for storage of hydraulic fluid?

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- Q.12 What is a servo system?
Q.13 What is the name of main component of hydraulic landing gear?
Q.14 What is the use of flow integrator?
Q.15 Give two main equipment of oxygen system.
Q.16 How is air is dried for pneumatic system?
Q.17 What is liquid to gas converters?
Q.18 What is the main indication in the fuel system?
Q.19 What do you mean by cold air units?
Q.20 Where the lubricant is used?

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Draw a basic hydraulic control system?
Q.22 How does an electro hydraulic servo system work?
Q.23 What is the role of Air bottles?
Q.24 How does indication system work?
Q.25 What is the design principle involved in landing gears?
Q.26 What is the purpose of pressure suits?
Q.27 What are the different components used in Hydraulic Systems.
Q.28 How does Fire extinguishing system work?

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