

932**October 2018**

Time - Three hours
(Maximum Marks: 75)

- [N.B: (1) Q.No. 8 in PART - A and Q.No. 16 in PART - B are compulsory.
Answer any FOUR questions from the remaining in each PART - A
and PART - B
(2) Answer division (a) or division (b) of each question in PART - C.
(3) Each question carries 2 marks in PART - A, 3 marks in Part - B
and 10 marks in PART - C.]

PART - A

1. What is aileron?
2. What are the advantages of fly-by-wire?
3. What are the different types of shock absorbers used in landing gears?
4. List out the main requirements of warning systems.
5. Which are the main types of hydraulic fluids?
6. Classify air pressure sources.
7. What are air conditioning systems?
8. What is fuel cross feed system?

PART - B

9. What do you mean by anti-skid system?
10. What is bungee cylinder used in landing gear?
11. What is the advantage of FBW over mechanical control system?
12. What is difference between speed brakes and spoilers?
13. Differentiate between open and closed hydraulic systems.
14. What are the main functions of an accumulator?
15. What is surge fuel tank?
16. What is thermal anti-icing?

[Turn over.....

PART - C

17. (a) Explain the typical landing gear systems used in aircraft.

(Or)

(b) Explain about brake system in detail.

18. (a) With a neat sketch, explain the operation of an elevator control systems.

(Or)

(b) Discuss briefly about the various types of trim tabs used in aircrafts.

19. (a) Describe the operation of a typical hydraulic system with neat sketches.

(Or)

(b) Explain about the pneumatic systems used in aircraft with neat illustrations.

20. (a) Discuss about anti-icing and de-icing methods used in aircraft systems.

(Or)

(b) Discuss in detail the cabin pressurization systems of modern aircraft.

21. (a) Explain the fuel system for Boeing-727 aircraft with neat sketch.

(Or)

(b) Explain about the pressure feed system with a neat sketch.
