



CBCS SCHEME

18AE/AS55

Fifth Semester B.E. Degree Examination, Jan./Feb. 2021 Aircraft Systems and Instrumentation

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 Explain about the push pull rod system and also describe about the FBW with neat diagram. (20 Marks)

OR

- 2 Describe about the three axis autopilot system with neat diagram and also explain about the power assisted and fully powered system. (20 Marks)

Module-2

- 3 Elucidate the operation and working principle of different types of hydraulic systems and also write notes on various components of hydraulic systems. (20 Marks)

OR

- 4 Discuss about the types of pneumatic system and also explain about the landing gear systems with neat diagrams. (20 Marks)

Module-3

- 5 a. Describe about the lubrication systems for piston engines. (10 Marks)
b. Explain about the components of turbofan engine with neat diagram. (10 Marks)

OR

- 6 Give detail description about the starting and ignition systems and sequence with neat diagram. (20 Marks)

Module-4

- 7 Explain about the basic air cycle and vapour cycle system with neat diagram. (20 Marks)

OR

- 8 With clear diagram discuss about the deicing and fire protection systems. (20 Marks)

Module-5

- 9 Explain the working principle of ASI, VSI, Altimeter and Mach meter with clear diagrams. (20 Marks)

OR

- 10 With clear diagram, discuss about the aircraft engine pressure and RPM measurement. (20 Marks)

* * * * *

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and/or equations written eg. 42+8 = 50, will be treated as malpractice.