

CBCS SCHEME

USN

--	--	--	--	--	--	--	--	--	--

18AE/AS743

Seventh Semester B.E. Degree Examination, Jan./Feb. 2023

Guidance, Navigation and Control

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. Write the concept of navigation, guidance and control in term of Missile. (06 Marks)
- b. Explain the working of MTI RADAR. (07 Marks)
- c. Comment on Air data information. (07 Marks)

OR

- 2 a. Explain the working of Pulse Doppler RADAR with relevant block diagram. (12 Marks)
- b. Write the limitation of MTI performance. (08 Marks)

Module-2

- 3 a. Explain how conical scan is used for tracking target. (08 Marks)
- b. Explain the working of monopulse tracking RADAR. (12 Marks)

OR

- 4 Explain the working of inertial navigation guidance along with components of inertial navigation system. (20 Marks)

Module-3

- 5 a. Comment on open and close loop system along with its advantage. (10 Marks)
- b. Comment on Missile Roll Stabilization along with block diagram. (10 Marks)

OR

- 6 Explain the control of aerodynamic missile along with diagram and moment equation. (20 Marks)

Module-4

- 7 Explain the working of proportional navigation guidance. (20 Marks)

OR

- 8 Explain the working of command guidance. (20 Marks)

Module-5

- 9 Explain the working of director fire control system along with block diagram. (20 Marks)

OR

- 10 Explain the working of longitudinal flight control system with block system. (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.