

No. of Printed Pages : 03

Roll No.

D-205

B. Tech. EXAMINATION, May 2017

(Fourth Semester)

(B. Scheme) (Main & Re-appear)

(AER)

AER-210-B

AIRCRAFT INSTRUMENTATION

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

(2-33) M-D-205

P.T.O.

Unit I

1. (a) Discuss the errors and error estimation in aircraft instrumentation. 7½
(b) Discuss with neat sketch the VTVM digital voltmeter and its utilisation. 7½
2. Discuss with neat sketch hetrodyne techniques and digital frequency counters. 15

Unit II

3. (a) Discuss the measurement of harmonic and intermodulation distortion. 10
(b) Discuss the performance characteristic of instruments. 5
4. (a) Discuss the translational and seismic displacements. 7½
(b) Discuss the velocity and acceleration measurements. 7½

M-D-205

2

Unit III

5. Discuss the instruments which are used for measurement of altitude and speed of aircraft. 15
6. (a) Discuss the instrument display panel and cockpit layout. 10
(b) What are the requirements of airborne equipment ? 5

Unit IV

7. (a) Explain with neat sketch the typical electronic/and digital aircraft system. 10
(b) Explain the term multifunction display. 5
8. (a) Discuss the electronic flight instrument systems. 10
(b) Explain the cockpit lighting. 5

(2-33) M-D-205

3

60