

End Semester Examinations - 2015-16 Even Semester - May 2016

14AE3009 Advanced Avionics

Set A

Time : 3 hrs
Total Marks: 100

1. a. Explain the classifications of the different segments of Navstar GPS. (6)
b. What are the positioning systems followed by different countries? Comment on the system developed by DoD, US. (7)
c. Explain the method of locating a receiver with the help of satellites. (7)

OR

2. a. Explain the fundamentals of radar principle and the basic design of a radar system with diagram. (10)
b. Comment on airborne weather radar. (10)
3. a. Explain the working principles of a radio altimeter with a neat sketch. (10)
b. Comment on the following. (10)
i. Variable IF
ii. Warnings
iii. Errors
iv. Performance accuracy
v. Advantages

OR

4. a. Give a short note on different flight control systems. (10)
b. Explain the type of control system that relieves the pilot from most of physical and mental fatigue while controlling an aircraft. (10)
5. a. Give a detailed note on history and classification of unmanned aerial systems. (10)
b. Give specification details of any two renowned UAVs. (10)

OR

6. Explain in detail about Electronic warfare. (20)
7. Explain basic concepts of aerial photography. (20)

OR

8. How are vision based navigation systems implemented. Explain. (20)
9. How are collision avoidance systems incorporated in aircrafts. Explain. (20)
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Wishing you All the Best
