Reg. No. :											
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**Question Paper Code: 39513** 

## B.E. / B.Tech. DEGREE EXAMINATION, MAY 2018

#### Elective

# Electronics and Instrumentation Engineering

# 01UEI913 - APPILICATION OF INSTRUMENTATION IN AEROSPACE AND NAVIGATION

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

### **Answer ALL Questions**

PART A -  $(10 \times 2 = 20 \text{ Marks})$ 

- 1. Compare TAS and EAS.
- 2. What is rate of climb?
- 3. Name any four navigation system.
- 4. What is meant by emergency locator transmitter?
- 5. What is stabilization control?
- 6. What is Star tracker?
- 7. Define ply rating.
- 8. Define AFCS.
- 9. What do you mean by purging the system?
- 10. What is trouble indicator light?

PART - B (5 x 16	= 80 Marks)
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11.	(a)	Explain about the mechanism of servo altimeter with necessary diagram.	(16)
		Or	
	(b)	Explain in detail about the electronic display used in aircrafts.	(16)
12.	(a)	Describe about smoke and fire detection system in a domestic aircraft.	(16)
		Or	
	(b)	Explain the cabin pressure measurement and temperature measurements diagrams.	with (16)
13.	(a)	What is GPS? How GPS plays a major role as a navigational aid.	(16)
		Or	
	(b)	Brief about the horizon sensing system.	(16)
14.	(a)	Explain in detail about the weapons system trainer.	(16)
		Or	
	(b)	Explain in detail the different flight controls and auto pilot troubles.	(16)
15.	(a)	Explain hydraulic systems troubles and landing gear troubles in detail.	(16)
		Or	
	(b)	Explain in detail about the usage of black box and its operation.	(16)