17AE81

Eighth Semester B.E. Degree Examination, July/August 2021 **Avionics**

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full auestions

			Note: Answer any FIVE full questions.		
aj.	1	а	a. With the help of neat labeled schematic diagram, explain the split Bus bar system used for		
g blank pages. = 50, will be treated as malpractice.	_	u.	power distribution in aircraft.	em used for (10 Marks)	
		b.	Explain the different circuit controlling devices and need for avionics in civil a	nd military	
as m			aircraft.	(10 Marks)	
ted a					
s. trea	2	a.	With the help of neat labeled schematic diagram, explain Bus bar system used distribution in aircraft.		
ages II be		b.	Explain briefly about special purpose cables in aircraft electrical system.	(10 Marks)	
ınk p), wi		0.	Explain ofteny about special purpose cables in allerant electrical system.	(10 Marks)	
g bla = 5(3	a.	Explain basic operational principle of an internal navigation system.	(10 Maulza)	
unin 12+8		b.	With a schematic diagram, explain the working of a stable platform system.	(10 Marks) (10 Marks)	
ema eg, 4			A STATE OF THE STA	(20111111111)	
the	4	a.	Explain the basic concepts and features of a typical fly - by - wire control syst	em with a	
s on Wri			neat sketch.	(10 Marks)	
line ions		b.	Explain Cooper Happer scale and common modes of failures and effects analysis.	(10 Marks)	
ross					
nal c /or e	5	a.	List the basic flight instruments used on the Aircraft, represent with a schematic	ic diagram,	
and		1	Basic Six' and basic 'T' type of flight instrument grouping.	(10 Marks)	
w d ator		b.	Explain the Digital air data computer, used for On-Board Air Data Processing.	(10 Marks)	
On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Any revealing of identification, appeal to evaluator and /or equations written eg, $42+8=50$, will be	_				
	6	a. b.	Briefly explain the following: i) Notch Antenna ii) Slot Antenna.	(10 Marks)	
opeal peal		υ.	Explain typical Avionics Subsystems, and Amplifier and Oscillator.	(10 Marks)	
g your answers, compuls of identification, appeal	7		Final and a minute of the control of		
	7	a. b.	Explain the principle of microprocessor with neat diagram. Explain the following: i) Touch screen ii) LED iii) LCD iv) Plasma panel.	(10 Marks)	
ansv		0.	Explain the following: i) Touch screen ii) LED iii) LCD iv) Plasma panel.	(10 Marks)	
our ide	8 a. Write a shot note on the following:				
ing y lo gr	O	a.	i) RAM ii) ROM iii) Cache memory iv) EPROM.	(10 M- 1-)	
iplet ealir		b.	Explain Civil cockpit and military cockpit.	(10 Marks) (10 Marks)	
con /				(1011111115)	
An A	9	a.	Briefly explain the following:		
Important Note : I. 2.			i) Classification of Radars ii) Electronic support measures.	(10 Marks)	
		b.	Explain electrical data bus system and communication system.	(10 Marks)	
npor	10	a.	Explain Navigation system and Flight control system.	(10 Marks)	
П		b.	Explain electronic warfare and fire control system.	(10 Marks)	

Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining hlank nages