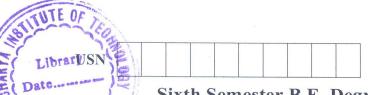
(10 Marks)

(10 Marks)

8



Sixth Semester B.E. Degree Examination, Aug./Sept.2020 Aircraft Materials

Time: 3 hrs. Max. Marks: 100

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part,

No	te:	Answer any FIVE full questions, selecting atleast TWO questions from e	ach part.	
		$\underline{PART - A}$		
1	a.	List down and explain the general properties required by materials that can be used in		
		aircraft applications.	(06 Marks)	
		Write a note on testing of Aircraft materials.	(08 Marks)	
	C.	Write a short notes on (i) Smart materials ii) Nano materials.	(06 Marks)	
2		Discuss the immenters of titering all the life in the		
2	a.	The state of the s		
	h	What is Super alloys? Discuss briefly nickel based super alloy and its applications.		
	U.	what is super anoys? Discuss offerty maker based super andy and its applications	s. (10 Marks)	
		A V	(10 Marks)	
3	a.	Explain the need for composite materials in aircraft applications.	(10 Marks)	
	b.			
		engines.	(10 Marks)	
			()	
4	a.	Explain the properties and applications of glass and transparent plastics.	(10 Marks)	
		Explain the applications of adhesives and sealants in aircraft.	(10 Marks)	
		PART - B		
5	a.	T		
		i) Phenomenon of Superconduction.		
		ii) Application of abrasive materials in aerospace.	(12 Marks)	
	b.	With the help of a neat sketch explain abrasion process.	(08 Marks)	
6	a.	List out the desirable properties of wood used in aerospace. Explain any three		
	h	Write short notes on :	(12 Marks)	
	υ.		(00 3/4 1)	
		i) Dopes and doping ii) Types of aircraft paints.	(08 Marks)	
7	a.	What is Corrosion and explain the different types of corrosion?	(10 Mayles)	
1		Describe the Cadmium plating process of aircraft materials.	(10 Marks)	
	U.	Describe the Caumum plating process of alleran materials.	(10 Marks)	

a. Explain the desirable properties required for cryogenic materials.

b. Distinguish between Mono propellants and Bipropellants.