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Sixth Semester B.E. Degree Examination, June/July 2018 Composite Materials

Time: 3 hrs.

Max. Marks: 100

Note: Answer FIVE full questions, selecting at least TWO questions from each part.

		at least TWO questions from each part.	
,		<u>PART – A</u>	
1	a.	Define term composite materials. Explain the need for developing comp	osite materials
	b.		(10 Marks) (10 Marks)
2	a.	Explain with a neat sketch hand layup moulding process.	
i.	b. ્	Explain with a neat sketch filament winding process.	(10 Marks) (10 Marks)
, , , , , , , , , , , , , , , , , , , ,	a. b.	Explain briefly the joining of composites. Explain with a neat sketch abrasive water jet cutting.	(10 Marks) (10 Marks)
4	a. b.	Briefly explain applications of composites in electronics. Explain applications of PMC's in Air craft, missile, and space sector.	(10 Marks) (10 Marks)
5	a. b.	Explain boron fibres and carbon fibres reinforcement materials. Explain need for developing MMC's and its future potential.	(10 Marks) (10 Marks)
6	a. b.	Explain with a neat sketch diffusion bonding. Explain with a neat sketch powder metallurgy technique.	(10 Marks) (10 Marks)
7	a. b.	Explain general properties of MMC. Explain types of MMC.	(10 Marks) (10 Marks)
8	a. b.	Define shape memory alloy. Explain muscle wire a application of shape n Explain hoop winding machine and Pultrusion.	nemory alloy. (10 Marks) (10 Marks)

 \sim vary reventing of identification, appeal to evaluator and for equations written eg. 42+8=50, will be treated as malpractice.

Important Note - 1 On a sempleting

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