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Manipal Institute of Technology, Manipal

(A Constituent Institute of Manipal University)



I SEMESTER M.TECH (PRINTING AND MEDIA TECHNOLOGY) END SEMESTER EXAMINATIONS, NOV/DEC 2015

SUBJECT: PRINTING MATERIAL TECHNOLOGY [PME 505]

REVISED CREDIT SYSTEM

Time: 3 Hours MAX. MARKS: 50

Instructions to Candidates:

- **❖** Answer **ANY FIVE FULL** questions.
- Missing data may be suitable assumed.

1A.	i) Explain the action of hydrogen peroxide in the bleaching of pulp.	3
	ii) Give suitable reasons: A finished positive plate is usually applied with a	
	prebake solution and then baked.	
1B.	Give the advantages (any six) of a compressible blanket over a conventional	3
	blanket.	
1C.	i) Explain the following properties of paper and mention their importance.	2
	a) Bursting strengthb) Porosity	+
	ii) Explain the basic requirements of a pigment to be used in printing inks.	2
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2A.	Explain the steps involved in the exposure and processing of solid	3
	photopolymer plates.	
2B.	Discuss on:	3
	a) Effect of refining on paper properties b) Internal sizing of paper using rosin	
2C.	i. Explain the following with reference to the recycling of paper:	2
	a) Alkali darkeningb) Acid shock	+
	ii. Mention the specific functions of the following as ink additives	2
	a) Surfactants b) Plasticizers c) Antioxidants d) Lubricants	
3A.	Explain the soft and hard calendering process. Discuss the influence of	3
	calendering on paper properties.	
3B.	What do you mean by the term 'Indirect photographic stencils'? Discuss on the	3
	types and method of preparation of indirect photographic stencils.	

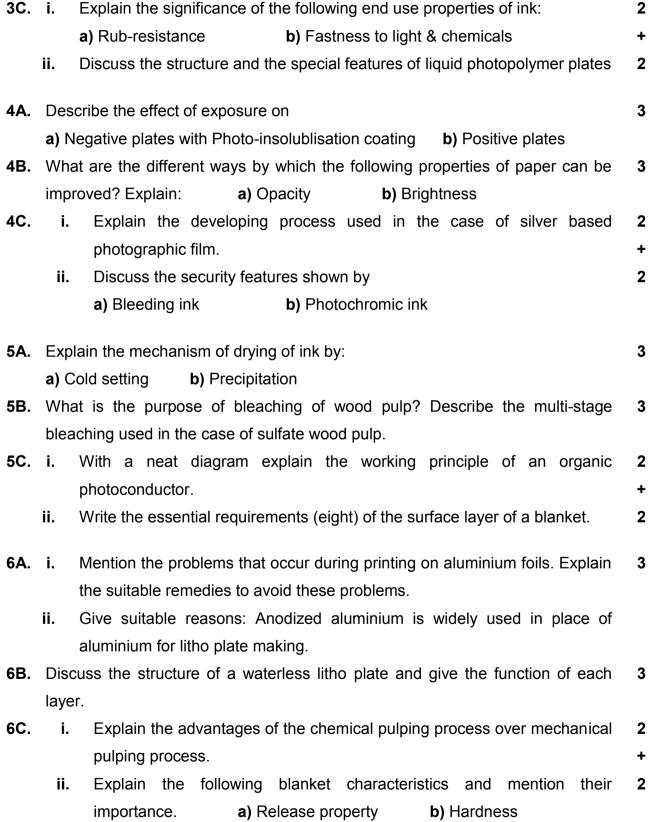
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