Marks	: 80 Duration: 3	hrs
N.B.	Question No.1 Compulsory. Answer any three from the remaining. Figures to the right indicate full marks Give illustrations and examples wherever necessary Indicate question no. properly	
1. a)	Discuss any three Overt & Covert security devices used in Currency notes, with their nature, appearance, verification mechanism and application method.	12
b)	Explain the Security printing presses used in for currency printing.	08
2 a)	Summaries 'Thermography printing process' with apt labeled diagram with: a) Thermal transfer printersb) D2T2 printersc) Inking system designed for both types	06 06 08
3. a) b)	Describe JDF in digital print environment, with its features and functions. Describe various proofing stages evolved in "Packaging print job", with different elements expected in these stages. Represent the same with apt workflow. (assume suitable data).	10 10
4. a)	List out variety of security inks available, with its appearance, detection, mechanism and nature.	10
b)	Explain various types of security devices used for plastic cards available today.	10
5.	Explain the following terms of digital image anatomy for "full color image" with suitable diagrams. a) Pixel b) Image resolution c) Bit depth	06 07 07
6. a)	Explain the threats and challenges posed to any brand owner for Brand Protection in today's market.	10
b)	Explain in brief various types of watermarks created during paper manufacturing.	10
	FND	