

BACHELOR OF PRINTING ENGINEERING THIRD YEAR SECOND SEMESTER - 2022**Subject: IMAGING TECHNOLOGY (HONS.) Time: 3 hours Full Marks: 100**

	Any Four	
1.	a) Briefly write on characteristics of laser beam.	10
	b) What is population inversion in laser production?	5
	c) Write on different types of gain media (active media).	10
2.	Write short notes on	
	a) Incandescent light sources.	7
	b) Fluorescent light sources	6
	c) High-intensity discharge lamps	6
	d) Light emitting diode	6
3.	a) Write about the color separation methods in digital camera etc.	10
	b) Write in details about various color image sensors.	15
4.	a) Draw the schematic diagram for making and reconstruction of hologram.	10
	b) Write in details on applications of hologram.	15
5.	a) Explain spontaneous emission, stimulated emission and stimulated absorption.	10
	b) Write on three components of laser.	15