

**B.E (Full-Time) DEGREE END SEMESTER EXAMINATION, NOV / DEC 2012**  
**PRINTING TECHNOLOGY BRANCH**  
**III SEMESTER – (REGULATIONS 2008)**

**PT9202 – IMAGING TECHNOLOGY**

**Duration: 3 hours**

**Max. Marks: 100**

Answer ALL Questions

**PART A**

(10 X 2 = 20 marks)

1. Explain the terms type family and type series.
2. What is copy mark-up?
3. Explain the principle AO modulator.
4. What is F-Theta lens?
5. Mention different types of films.
6. What is density?
7. Explain the term resolution.
8. Explain the principle of CCD.
9. What is a virtual drum.
10. Mention different technologies used in inkjet printing?

**PART B**

(5 X 16 = 80 marks)

11. Explain the working of a flat bed scanner with diagrams.
12. (a) A manuscript contain 6,89,569 words. This is to be set with fount size of 14 p ints with 2 point line spacing for a line length of 37picas and page depth of 67 picas. Find the total number of pages. Find the number of pages if the point size is changed to 13/14points.  

(or)

(b) Explain the meaning of 16 proof reader's marks giving their textual and marginal marks.
13. (a) Explain the principle of laser. List three laser sources and compare them.  

(or)

(b) Explain the schematic diagram of the optical system of alaser typesetter and explain the functions of each components.
14. (a) Explain the theory and steps involved in halftone reproduction.  

(or)

(b) Explain in detail the various lens aberrations.
15. (a) Explain an internal drum imagesetter with diagrams and mention its advantages.  

(or)

(b) Explain in detail with diagram the continuous and drop on demand inkjet printing.