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**B.E / B.Tech. (Full Time) DEGREE END SEMESTER EXAMINATIONS, APR/MAY 2014**  
**PRINTING TECHNOLOGY**  
**IV Semester**  
**PT373/PT9253 Colour Reproduction**  
**(Regulations 2004/2008)**

Time: 3 Hours

Answer ALL Questions

Max. Marks 100

**Part – A (10 x 2 = 20 Mark)**

1. Define hue, chroma and value.
2. What are the applications of additive and subtractive colour theory?
3. Which screen rulings are used for newspapers? Justify.
4. What is moire?
5. State the advantages of GCR.
6. Explain the significance of selecting correct white point and black point.
7. Define specular and diffuse reflection.
8. State the proportionality rule.
9. What is the need for colour management?
10. What is a profile?

**Part – B (5 x 16 = 80 Mark)**

11. Discuss in detail about the various colour reproduction objectives suitable examples.
12. a. With neat diagram, explain the working principle of spectrophotometers.  
(or)  
b. Explain in detail on how chromaticity diagram is obtained from colour matching functions. Also describe about the significant parameters in chromaticity diagram.
13. a. Explain the role of Jones diagram in tone reproduction with diagram.  
(or)  
b. What are the deficiencies in printing inks? How are they compensated by masking process? Explain.
14. a. Discuss in detail about additivity rule and the factors causing additivity failure.  
(or)  
b. With neat diagram, explain about the optical interfaces between the light, paper and ink film.
15. a. Explain the steps in creating a monitor profile.  
(or)  
b. Discuss in detail about gamut mapping and rendering intents.