

B.E. (Full Time) DEGREE END SEMESTER EXAMINATIONS, NOV / DEC 2012
PRINTING TECHNOLOGY BRANCH
SIXTH SEMESTER
PT 382 GRAVURE PRINTING
(REGULATIONS 2004)

Time: 3 hr

Max Mark: 100

Answer ALL Questions
Part – A (10 x 2 = 20 Mark)

1. List out the different variables of a gravure well?
2. State the need of copper plating in gravure cylinder construction?
3. What is the need to use a cross line screen in gravure process?
4. Define D.P.H.
5. What is known as dry angle and wet angle in doctor blade positioning?
6. How is the wiping pressure of the doctor blade calculated?
7. How does modular gravure printing machine advantages over regular gravure printing machine?
8. How does outfeed coating done in gravure press?
9. Why does the web break during print and state its remedial action.
10. What are the requirements of a film positive used in gravure process?

Part – B (5 x 16 = 80 Mark)

11. (i) Discuss on the different methods adopted to reuse the gravure cylinder. (8)
 (ii) What is balancing? With diagram, explain the different types of balancing (8)
12. (a) With neat diagram, explain the different steps involved in the preparation of image carrier for gravure printing using Diffusion etch method.
 (or)
 (b) (i) Explain with neat sketches, the different methods which make use of computers for the preparation of image carrier in gravure process (12)
 (ii) How is direct transfer method different from conventional method in gravure printing? (4)
13. (a) List out the different types of inking system used in gravure process and explain them with diagram
 (or)
 (b) (i) State the reasons for impression roller deflection and explain the ways to avoid deflection (8)
 (ii) With neat diagram, explain the parts of a doctor blade and discuss on its functions. (8)
14. (a) List out and explain the various inline converting operations carried out in gravure printing unit.
 (or)
 (b) What are the different types of press configuration in gravure process and explain them with neat diagram.
15. (a) Explain the procedure of waste disposal carried out in gravure unit and discuss about the environmental concerns in the gravure press.
 (or)
 (b) State the need for maintenance and explain the different types of maintenance to be done in the gravure press.