

B.E. (Full Time) DEGREE END SEMESTER EXAMINATIONS, NOV / DEC 2011  
 PRINTING TECHNOLOGY BRANCH  
 SEVENTH SEMESTER  
 PT 9403 GRAVURE AND SCREEN PRINTING  
 (REGULATIONS 2008)

41

Time: 3 hr

Max Mark: 100

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

1. Gravure process is not suitable for jobs with lesser number of impressions. Why?
2. State the need for using a cross line screen in gravure process?
3. Why does the doctor blade oscillate during the press run of gravure printing?
4. What are the reasons for impression roller deflection in gravure machine during printing?
5. List out the variables that affect the quality in screen printing?
6. What are the different types of frames used in screen printing?
7. How is stencil prepared in wax resist method used for screen printing?
8. What is known as 'wicket dryer'?
9. What are the reasons for early stencil breakdown in screen printing?
10. When does edge curl occur in the stencil used for screen printing?

Part – B (5 x 16 = 80 Mark)

11. With neat diagram, explain the different steps involved in the preparation of image carrier for gravure printing using Diffusion etch method.
12. (a) With neat sketches, explain the parts of a doctor blade assembly and also discuss the different doctor blade setting with their merits and demerits.

(or)

(b) (i) What are the different types of gravure inking system and explain any three with diagram. (10)

(ii) Discuss on the methods used to create desired pressure in the printing nip of the gravure process with neat diagram. (6)

13. (a) (i) List out and explain the different fabric terminology used for mesh classification? (8)
- (ii) Discuss on the different squeegee techniques used to achieve the desired printed result? (8)

(or)

(b) (i) List out and explain briefly about the basic essential components of screen printing? (8)

(ii) Discuss on the types of flat substrates used in screen printing (any four)? (8)

14. (a) With diagram, explain the different steps used in the preparation of stencil for screen printing by indirect process and also discuss about the different layers of the film used for stencil preparation.

(or)

(b) With sketches, briefly explain the different types of screen printing presses?

15. (a) List out and explain the various health and safety issues that has to be taken care in a press.

(or)

(b) Explain the procedure of waste disposal carried out in gravure and screen printing presses and discuss about the environmental safeguards to be carried out.