

Bachelor of Engineering
Printing Technology IV Semester May 2013
PT9251 Sheetfed Offset Technology

8

Time 3 Hrs.

Max.Marks:100

Answer All Questions

Part A

10x2=20 Marks

1. Define back edge fan out.
2. What is dot gain? How will you identify visually?
3. What is the velocity of sheet in a continuous feeder of a machine having a cylinder diameter of 520mm? The speed of the machine is 18000 impressions per hour.
4. What is known as chute delivery?
5. Name different types of side lays available?
6. What parameters are to be monitored in fountain solution?
7. Name different types of dampening systems?
8. Enumerate the factors to be considered while printing a multi colour job?
9. What are the reasons for sheets to crease during printing?
10. What are the types of front lay mechanisms available? Which is preferable?

Part B

5x16=80 Marks

11. Explain the three important phenomena that enables the success of lithographic offset process in detail.
12. a. Explain different methods of sheet transfer systems employed in a multi colour press.
Or
b. Explain the various types of sheet insertion systems employed.
13. a. What is conditioning explain the factors to be considered while preparing the sheets for quality printing?
Or
b. Explain the continuous sheet feeding mechanism and its features in detail.
14. a. Explain the drive mechanism of an offset printing machine with a description on each of its component parts. How will you determine the leading edge of the plate and blanket cylinders of a machine?
Or
b. Explain the two methods adopted for perfecting /multicolour in a convertible press.
15. a. I. Explain the types of sheet detector mechanisms and their functional aspects in detail.
II. Explain the need and method of application of anti setoff spray.
Or
b. I. Explain the process of printing metal sheets in an offset machine and its functional elements.
II. What are the ancillary operations and how it could be carried out in an offset machine?