
B.E. (Full Time) DEGREE END SEMESTER EXAMINATIONS, Nov/Dec 2011

PRINTING TECHNOLOGY BRANCH

IV SEMESTER

PT 9251 Sheet Fed Offset Technology

(REGULATIONS 2008)

23

Time 3 Hrs. Max.Marks:100

Answer All Questions

Part A **10x2=20** Marks

1. How static electricity of stock is dealt with in a printing machine?
2. Name different types of sheet detectors employed in a printing machine?
3. Name two non-bearer and two bearer contact presses and their manufacturer's name?
4. How the back edge fan-out is compensated?
5. Why rotary cylinder grippers are superior to other infeed systems?
6. What is meant by wickets in a metal printing press?
7. How the feeders in a metal printing press are different?
8. What do you understand by the term late and early sheet?
9. In a continuous sheet feeder what is the speed at which a sheet having a dimension of 370×520mm has to be accelerated if a machine is running at a speed of 12,000 i.p.h.
10. Why all the three cylinders in an offset printing unit are not aligned in a single line?

Part B **5x16=80** Marks

11. i.Explain the various sheet control devices provided in a sheet feeder. 10
ii.Describe an advanced sheet feeding system where some of the sheet controlling devices are eliminated. 6

12. a.Discuss the various factors that are related to the successful working of offset lithographic process.

Or

b.Explain how the sheet separation, lifting and forwarding cycles are controlled in a continuous feeder.

13. a.i.Describe the mechanism involved in opening and closing of gripper bar assembly and the parts associated with it.
ii.What precautions are required in setting and adjustment of grippers.

Or

b.Explain the various in-line operations that could be performed in an offset machine.

14. a.How will you evaluate offset printing blankets for their performance?

Or

b.i.How the impression is imparted in an offset printing unit? Explain the mechanisms involved. 8
ii.How the cylinders are set in a bearer contact and non bearer contact presses? 8

15. a.Describe any one type of dampening system in detail.

Or

b.Expalin the following:
i.Grain direction of paper, ii.Directional nature of blanket, iii.Hysteresis, iv.Packing gauge.