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B.E. / B.Tech (Full Time) DEGREE END SEMESTER EXAMINATIONS, NOV / DEC 2012  
PRINTING TECHNOLOGY BRANCH  
FIFTH SEMESTER  
**PT 9301 – PRINTING INKS**  
(REGULATIONS 2008)

Time: 3hrs

Max Marks: 100

Answer ALL Questions

**Part - A (10 X 2 = 20 Marks)**

1. What are resinated pigments?
2. What is the importance of oil in ink?
3. Define peptization
4. What is solvent power?
5. What is the use of glass beads in ink manufacture?
6. Define Potting.
7. Define thixotrophy.
8. Define rheopexy.
9. What is the use of security Inks?
10. Define holography.

**Part - B (5 X 16 = 80 Marks)**

11. Explain in detail about the IR drying mechanism
12. a. Explain in detail about the Black pigments.  
(Or)  
b. (i) what is the role of plasticizers in printing inks. (8)  
(ii) Explain the properties of additives used in inks. (8)
13. a. Explain the properties of solvents used in printing inks.  
(Or)  
b. Explain in detail about the Natural resins.
14. a. How the paste inks are manufactured by attritor type method?  
(Or)  
b. Explain in detail about the Tack measurement.
15. a. Explain the effect of shear stress in the manufacture of inks.  
(Or)  
b. Explain about the environmental issues associated with printing inks.