

Code: R7410307

R7

IV B.Tech I Semester (R07) Supplementary Examinations, May 2012
MACHATRONICS
(Mechanical Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions
All questions carry equal marks

1. Discuss the applications of mechatronics specific to a CIM environment.
2. Explain different types of filters and their applications.
3. Explain the relative advantages and disadvantages of electro-pneumatic actuation systems over electro-hydraulic actuation systems.
4. What does MOSFET mean? Illustrate how it can be used to control a d.c. motor.
5. How are vector drives different from variable frequency drives? Explain.
6. State in detail the differences between microprocessor and microcontroller.
7. Explain the factors involved in PLC selection.
8. What are the applications of programmable motion controllers? Explain in detail.
