

Code :R7410307

R7

IV B.Tech I Semester(R07) Supplementary Examinations, May/June 2011  
**MECHATRONICS**  
(Mechanical Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions  
All questions carry equal marks

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1. Discuss the applications of mechatronics specific to a FMS.
2. Discuss the capabilities of digital signal processing.
3. Explain the relative advantages and disadvantages of pneumatic actuation systems over hydraulic actuation systems.
4. Discuss various protection schemes available in electronic interface subsystems.
5. Explain the applications of variable frequency drives.
6. What are microcontrollers? Explain the general form of microcontrollers with neat sketches.
7. What are the applications of programmable logic controller?
8. Explain various operations performed by programmable motion controllers. Explain.

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