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Name :

Reg. No:



EIGHTH SEMESTER B.TECH DEGREE SUPPLEMENTARY EXAMINATION, JUNE 2018

ME 04 803 MECHATRONICS AND MACHINE CONTROLS

Time : Three Hours

Maximum : 100 Marks

**Answer all questions
(5 marks questions)**

1. Briefly explain about the scope of mechatronics?
2. Explain about the working principle of LCD?
3. Differentiate open loop system from closed loop System?
4. What is meant stability of control system?
5. What are the applications of actuators?
6. What is Coanda effect?
7. What are check valves?
8. Explain about graphic symbols used for control valves? (8 x 5 = 40 marks)

9. Explain in detail about evolution of mechatronics?

OR

10. Explain the principle of working of galvanometric and potentiometric recorder? What are visual display unit?
11. Write down the different rules for block diagram reduction? Derive Mason's gain formula?

OR

12. Explain in detail about time domain analysis of control system? What is steady state error?
13. Explain detail about constructional details of any two actuators?

OR

14. What are volume boosters? What is working principle of fluid logic control?
15. Explain in detail about types of control valves?

OR

16. Explain the working principle of hydraulic pump? What is air treatment and pressure regulation? (15 x 4 = 60 marks)
