

B.E. (Instrumentation Engineering) Model Curriculum Semester-VI
IN604M - Control System Components

P. Pages : 2

Time : Three Hours



GUG/W/24/14031

Max. Marks : 80

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- Notes :
1. Same answer book must be used for each section.
 2. All questions carry marks as indicated.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Assume suitable data wherever necessary.
 5. Diagrams and Chemical equation should be given wherever necessary.
 6. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Explain in detailed emergency switch and micro switch. 8
b) Illustrate with neat sketch the working of reed relay and give its application. 8

OR

2. a) Explain contactors in detailed. 8
b) Write short note on following. 8
 - a) Application of Contactors
 - b) Hermetically sealed relay
3. a) Explain the working of series split field DC servomotor. 8
b) With neat sketches, explain the constructional details and working principle of variable reluctance stepper motor. List any four applications of stepper motor. 8

OR

4. a) With neat sketches, explain the constructional details and working principle of hybrid stepper motor. 8
b) Discuss the application of AC servo motor as AC position control system. 8
5. a) Discuss application of synchros as error detector. 8
b) Discuss what are circuit breakers? What is the need of circuit breakers? 8

OR

6. a) Draw and explain the Construction and working of Angle type control valve. 8
b) What are different types of feeders? Elaborate the working of necessity of feeders. 8

