

GANPAT UNIVERSITY

B. Tech. Semester: VIII- Marine Engineering

Regular Examination April – June 2016

2MR803 Marine Automation and Control

Time: 3 Hours / As per Scheme

Total Marks: 70

- Instruction:**
1. Attempt all Questions.
 2. Assume suitable data if necessary.
 3. Figure to the right indicates full Marks.
 4. Start new Question on New Page.

Section - I

Que. – 1 Define the open loop and close loop system in automation control with suitable diagram. **12**

OR

Que. – 1 What is cascade control system and when it is used in automation? **12**

Que. – 2 Define the term feedback. AVR of generators are given feedback from its own out put Voltage. Explain with diagram. **11**

OR

Que. – 2 Explain the term proportional, Integral and Derivative controls for automation purpose. Draw a block diagram of P-I-D. Controller. **11**

Que. – 3 Define Electric actuator control valves for automation. **12**

Section – II

Que. – 4 What are the different kinds of measuring devices? Explain in brief. **12**

OR

Que. – 4 What do you understand by the term pressure measurement? Explain with diagram. **12**

Que. – 5 Explain the function of marine boiler automation combustion control system. **11**

OR

Que. – 5 Define the term Programmable logic controls (PLC). Where PLC'S can be used. Draw a schematic ladder diagram of DOL starter to run the SCIM three phase motor. **11**

Que. – 6 What is Boolean logic system? Explain different kinds of gates used in automation. **12**

*****END OF PAPER*****