

Instruⁿ Project Docu. & Exe. / 02.12.16



(3 Hours)

Q.P. Code : 728200

[Total Marks : 80

- N.B. :**
- (1) Q I is compulsory
 - (2) Solve any **three** questions out of remaining **five** questions
 - (3) Assume any suitable data if required
 - (4) Draw neat diagram wherever required

1. Answer the following. (Any **four**) 20
 - (a) Define project and explain project structure with the help of success triangle.
 - (b) Explain Purchase requisition Note (PRN) with format.
 - (c) Explain role of each member of engineering design team.
 - (d) Explain conduit & tray schedule.
 - (e) Draw & explain single line network diagram. Justify how it indicates one-line connectivity.
 - (f) Describe any 5 SAMA symbol.
2. (a) Draw & explain any 2 hook-up diagrams. 10
(b) List out softwares used in documentation & design. Give typical features of INTOOLS. 10
3. (a) Explain terms FAT & SAT. 10
(b) Draw & explain P&ID diagram for flow control loop. Prepare instrument index sheet and explain specification sheet for any 1 instrument. 10
4. (a) Describe electronic loop diagram with typical example. 10
(b) Explain in short HMI specification. 10
5. (a) How the projects are developed & executed? Explain with typical industrial project flow. 10
(b) Describe the checkout procedure for temperature transmitter and control valve. 10
6. (a) Explain the following task of the system integrator:- 10
 - (i) Operations & maintenance (O & M) manual (ii) Commissioning.
(b) Explain the various standards used in instrumentation project. 10