

PHASE II – DESCRIPTIVE TYPE WRITTEN TEST
ASSISTANT ENGINEER (INSTRUMENTATION)
(Answer ANY 6 questions given below)

1. (i) What is the purpose of Thermo wells and what materials are used in it? (2.5 Marks)

(ii) Write a short note on the working of Rotameter? (2.5 Marks)

2. (i) What are the standard electric & pneumatic signals used in Industrial Instrumentation? What are their advantages & disadvantages? (2.5 Marks)

(ii) Write on functioning of a pneumatic actuator or an electric actuator?
(2.5 Marks)

3. (i) Differentiate between Explosion Proof System and Intrinsically Safe System?
(2.5 Marks)

(ii)What is Zener Diode and Explain its application? (2.5 Marks)

4. Choosing a suitable sensor give a method to find out volume of water at various levels in a tank with a given uniform cross section. (5 Marks)

5. Draw simple ladder logic diagram for motor on/ off system. (5 Marks)

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6. Explain working of a 3/2way pneumatic solenoid valve with a schematic. (5 Marks)

7. (i) Explain the working principle, types and applications of proximity switch?
(2.5 Marks)

(ii) What are the steps that you would adopt while laying and terminating electric power & signal cables between two equipments? (2.5 Marks)