



IQRA National University, Peshawar  
Department of Electrical Engineering  
Spring 2020  
Elective 5 (Power).  
Elective 4 (Electronics).  
**Industrial Electronics**  
Terminal Examination

Name: \_\_\_\_\_

Reg.No: \_\_\_\_\_

Instructor: Engr. Sanaullah Ahmad

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Total Marks : 50

Attempt All Questions.

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**Question No 1.**

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- A. Consider a lubricating oil tank in Industrial Plant having 2 sensors, one is put near to the bottom and one near to top, to fill the tank, motor A will pump oil to tank until the high level sensor turns on, at that point the motor A turns OFF. Motor A is turned ON when the level fall below the low level sensor. Explain the states of PLC operating cycle with help of neat ladder diagrams. **CLO-3**
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**Question No 2**

20

- A. Write some benefits of Industrial Automation **CLO-2**  
B. Briefly explain the components and functions of SCADA system **CLO-2**
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**Question No 3**

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- A. Differentiate between Hardwired control systems and PLC system **CLO-3**  
B. What are the function of SCADA systems **CLO-2**
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