

JK Lakshmipat University Jaipur
INSTITUTE OF ENGINEERING AND TECHNOLOGY
 EndTerm 2, 2022

Roll No.....

Open notes – Open book exam/ Laptop allowed

Course Code : EE2105 Ind. Aut. And IoT II

Time: 2 hours

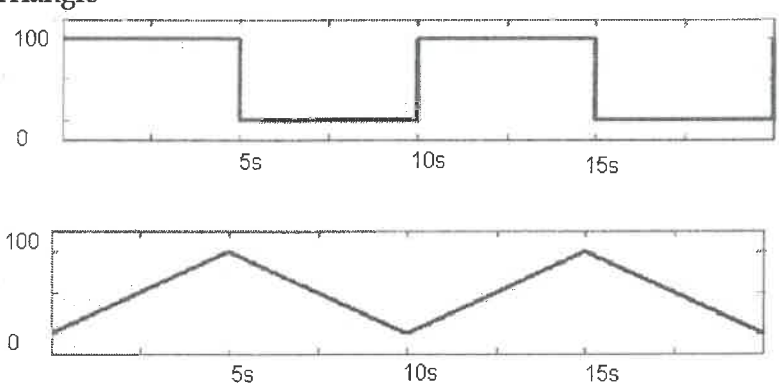
Max. Marks: 30

Instructions to students:

1. Do not write anything other than your roll number on question paper.
2. Assume suitable data wherever required and mention it clearly.
3. Writing appropriate units, comments, nomenclature, and drawing neat sketches/schematics/ flow chart wherever, required are an integral part of the answer.
4. You are not allowed to use Google or other search engines while solving this exam.
5. You are not allowed to accept/give help from/to another person while solving this exam.

Q1	Discuss the pros and cons of following protocols: MODBUS vs MQTT	5 marks CO 1,2
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Write Node-Red and Arduino code to solve the following problem:

Q2	Your Arduino board must be able to generate the following two kinds of signals: Square o Triangle  When the string "SQUARE" or "TRIANGLE" is published to MQTT broker, to the following topic: IIoTEndTerm/Name/SIGNAL the corresponding signal should be displayed in Node Red dashboard. Note: Name is student's name.	15 marks CO 3,4,5
Q3	The type of signal, SQUARE/TRIANGLE can also be controlled and displayed through Node Red dashboard	10 marks CO 3,4,5