

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATIONS-2022

M.Tech IoT, Ist Semester (ECE)

COURSE CODE (CREDITS): 21M1WC133(3)

MAX. MARKS: 15

COURSE NAME: INDUSTRIAL AUTOMATION AND IIOT

COURSE INSTRUCTORS: Dr. Rajiv Kumar

MAX. TIME: 1 Hour

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*Note: All questions are compulsory. Marks are indicated against each question in square brackets.*

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Q-1. a) Give an evolution of smart factory with reference to manufacturing. [CO-1], 2

b) Explain each of the following characteristics of smart factories:

- i) Connection
- ii) Optimization
- iii) Transparent
- iv) Proactivity

[CO-1], 2

Q-2. a) In the context of Industry 4.0, analyze the aspects of smartness and connectivity in the growth of business. [CO-1], 2

b) In industry 4.0, information communication technology is considered as main nervous system in any manufacturing industry. Give justification. [CO-1], 2

c) Make a comparison of fourth industrial revolution with third industrial revolution. [CO-1], 2

Q-3. a) What are static and dynamic characteristics of sensors? [CO-5], 1.5

b) Explain about important communication protocol for IoT applications. [CO-5], 1.5

c) What do you mean by the term QoS with reference to IoT?

[CO-5], 2