# K. K. Wagh Institute of Engineering Education & Research, Nashik
## (An Autonomous Institute From A.Y. 2022-23)

| InSem Examination-IISummer2025 | |
|---|---|
| Exam Seat No.: | |
| Academic Year:2024-2025 | Semester:VI |
| Class:TY | Program:B.Tech |
| Branch Code:ETC | Pattern:2022 |
| Name of Course:Industry 4.0 and Industrial IOT | Course Code:ETC223017 |
| Max. Marks:30 | Duration:2.30 Hrs. |

**Instructions:** Candidates should read carefully the instructions printed on the Question Paper
and on the cover page of the Answer Book, which is provided for their use.

1. This question paper contains 1 page.
2. Answer to each new question is to be started on a new page.
3. Assume suitable data wherever required, but justify it.
4. Draw the neat labelled diagrams, wherever necessary.

**Marks CO**

**Question No. 1**

1 a)  What is the typical architecture of an IIoT system, and how does it enable industrial operations?    (7)    CO1

**Question No. 2**

2 a)  Explain the main components of an IIoT ecosystem.    (8)    CO1

**OR**

2 b)  How does IIoT improve decision-making through real-time data and analytics?    (8)    CO1

**Question No. 3**

3 a)  What are the key factors to consider when selecting sensors for IIoT applications?    (7)    CO2

**Question No. 4**

4 a)  What makes Z-WAVE a popular choice for smart home applications?    (8)    CO2

**OR**

4 b)  How does OPC-UA ensure secure and standardized data exchange across multiple platforms?    (8)    CO2

····· **End of question paper**·····