

Enrollment No: _____



INDUS UNIVERSITY IITE
Constituent Institutes of Indus University

X-CE0622-005

Semester: VI

Branch: CE/IT/CSE

END SEMESTER EXAMINATION – MAY 2023

Subject Code: CE0622

Subject Name: Internet of Things

Date: 15/05/2023

Time: 02:00 PM-05:00 PM

Day: Monday

Total Marks: 100

Instructions:

1. Attempt all questions
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicates full marks

- Q.1** **A** List the applications of IoT in various fields. Explain any three application in detail with a proper example. **10**
- B** Draw block diagram of Physical Design of IoT and explain each block in detail. **10**
- Q.2** **A** List out the steps involved in IOT system design methodology and explain operational view specification in detail. **10**
- B** Explain SaaS, PaaS, IaaS in detail. **10**
- Q.3** **A** Discuss various security and privacy issues in the Internet of things. **10**
- B** Draw open IOT architecture and explain each block in detail. **10**
- Q.4** **A** List the features of ESP8266. Compare ESP8266 and Arduino board. **10**
- B** What is cloud computing ? What are Basic Cloud Characteristics? **10**
- Q.5** **Any Four**
- A** Draw the connection diagram of interfacing a buzzer with arduino and write a program to generate different tone using PWM. **05**
- B** Write a program to interface Ultrasonic sensor with arduino board. **05**
- C** Write a program to Interface LDR sensor and print light intensity on serial terminal. **05**
- D** Explain the use of the following functions of arduino. **05**
1. analogWrite()
 2. Serial.println()
- E** Describe GPIO library and its functions available in raspberry pi. **05**

F Explain the following functions.

1. WiFi.begin()
2. WiFi.config()

05
