



*Sambath*

# Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD (now MoE)

Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC

Coimbatore - 641 043, Tamil Nadu, India

## Continuous Internal Assessment Test I – February 2026

### IV Semester

**Class : II UG**

**Time: 2 hours**

**Major : English, ARVR, FSMD, Psychology, BCA, BCBT, Physical Education**

**Maximum Marks: 60**

### 23BCSGE5 Introduction to Internet of Things

#### Course Outcomes:

At the end of the course, students will:

1. Understand the fundamentals of IoT
2. Understand the various applications of IoT
3. Enable to learn about different communication modules
4. Understand the basics of cloud platforms for IoT
5. To work with Arduino and different sensors

#### Part - A

6 x 1 = 6

#### Choose the Correct Answer

1. Which layer of IoT architecture is responsible for data collection from sensors?  
a. Application layer    b. Network layer    c. Perception layer    d. Processing layer    CO1 K1
2. Who is credited with coining the term "Internet of Things" in 1999?  
a. Vint Cerf    b. Kevin Ashton    c. Tim Berners-Lee    d. Bill Gates    CO1 K1
3. Which of the following is considered a "Short-Range" wireless networking standard commonly used for IoT wearables?  
a. NB-IoT    b. LTE-M    c. Bluetooth    d. Satellite    CO3 K1
4. Which of the following best defines IoT?  
a. A network of computers only    b. A system connecting physical objects to the internet  
c. A software used for data storage    d. A programming language    CO1 K1
5. Which of the following is a short-range wireless communication protocol commonly used in IoT?  
a. SMTP    b. Zigbee    c. FTP    d. HTTP    CO2 K1
6. Which of the following is *not* a common application domain of IoT?  
a. Smart healthcare    b. Smart agriculture    c. Smart transportation    d. Manual bookkeeping    CO2 K1

#### Part - B

3 x 6 = 18

#### Answer ALL Questions

Each answer should not exceed 400 words or two pages

7. a. Discuss a comprehensive overview of Internet of Things and its importance  
(or)  
7. b. Explain the Design Architecture of Internet of Things.    CO1 K2
8. a. Examine the role of IoT in the development of Smart Cities, highlighting at least three key applications.  
(or)  
8. b. Explain how IoT-enabled Smart Cities improve urban sustainability and resource management.    CO2 K2
9. a. Write a short note on MQTT.  
(or)  
9. b. Explain the role and significance of Communication Modules in an IoT.    CO3 K2

#### Part - C

3 x 12 = 36

#### Answer ALL questions

Each answer should not exceed 800 words or four pages

10. a. Briefly discuss on IoT enabling technologies, IoT levels and the advantages of IoT.  
(or)  
10. b. Explain the importance of IoT-based systems over traditional monitoring systems, with three real time examples.    CO1 K2
11. a. Explain the impact of IoT in various domains and advantage of Home automation and smart street Lighting.  
(or)  
11. b. Discuss the advantages and disadvantages of IoT in healthcare.    CO1 K2
12. a. Explain wireless networking and communication protocols in the context of IoT.  
(or)  
12. b. Briefly discuss the history and the challenges of IoT.    CO2 K2