Avinashilingam Institute for Home Science and Higher Education for Women
Deemed to be University Estd.u/s 3of UGC Act 1956, Category A by MHRD [now MoE]
Re-accredited with an A++ Grade by NAAC CGPA 3.65/4, Category I by UGC
Coimbatore-641043, Tamil Nadu, India

Continuous Internal Assessment Test I – February-2026
Semester VI

Class : III UG Repeater
Major : Computer Science

Time : 2 Hours
Max. Marks: 60

21BCSC29 Introduction to IoT

Course Outcomes:
CO1: Understand the basic ideas of IoT
CO2: Learn the functional design of the IoT based devices
CO3: Design and implement an IoT device for a given problem domain
CO4: Understand the areas in which IoTs can be designed
CO5:Master the basics of IoT design methodologies

Part A **6 x 1 =6**
Choose the Correct Answer

1 . IoT devices are connected using_____. CO1K1
a) Wires only b) Wireless networks c) USB cables d) Switches

2 . What does IIoT stand for? CO1K1
a) Industrial Internet of Things b) Incorporate Internet of Technology
c) Index Interface of Things d) Intense Integration of Technology

3 . Identify among the following which is not a fundamental component of IoT system. CO2K2
a) User interface b) sensors c) transformers d) network

4 . Which sensor type is commonly used to measure temperature in IoT devices? CO2K2
a) Infrared sensor b) Ultrasonic sensor c) Photocell d) Thermocouple

5. What is the first step in IoT design methodology? CO3K1
a) Process specification b) Purpose and requirements specification
c) Domain model specification d)Testing

6. In IoT design, the process specification focuses on _____. CO3K1
a)The detailed steps and methods for data processing b) The hardware design
c) The types of communication models used d) How to develop applications

Part B **3 x 6 = 18**
Answer ALL questions
Answer should not exceed 400 words or two pages

7. a. Explain in brief on Physical and Logical Design of IoT CO1K2
(or)
7. b. How cloud computing contributes to the functioning of IoT? Explain briefly. CO1K2

8. a. Write a short on various sensors used in IoT. CO2K2
(or)
8 .b. Discuss how smart parking applications enhance urban living and safety. CO2K3

9. a. Write the applications of IoT systems in environment monitoring. CO3K2
(or)
9 .b. Discuss the purpose and requirements of IoT design. CO3K2

Part C **3 x 12 = 36**
Answer ALL questions
Answer should not exceed 800 words or four pages

10. a. Discuss the various Communication models used in IoT. CO1K2
(or)
10. b. Explain the IoT enabled technologies in detail. CO1K2

11 .a. Explain the Home Automation System with a neat diagram. CO2K2
(or)
11. b. Explain briefly on IoT applications in healthcare. CO2K2

12 .a. Describe the IoT design methodology in detail. CO3K2
(or)
12 .b. Explain the IoT Domain model specification in detail. CO3K2