

*K. Sambal*



**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 I – February-2025**  
**Semester VI**

**Class : III UG**  
**Major : Computer Science**

**Time : 2 Hours**  
**Max. Marks: 60**

**21BCSC29 -Introduction to IoT**

**Course Outcomes:**

1. Understand the basic ideas of IoT
2. Learn the functional design of the IoT based devices
3. Design and implement an IoT device for a given problem domain
4. Understand the areas in which IoTs can be designed
5. 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) None of the above
- 2 . What does IoT stand for? CO1K1  
a) Internet of Things                      b) Internet of Technology  
c) Interface of Things                      d) Integration of Technology
- 3 . Which of these sensors is used in IoT systems for detecting motion or movement? CO2K2  
a) Humidity sensor                      b)Pressure sensor                      c) GPS sensor                      d) Motion sensor
- 4 . Which sensor is used to monitor water levels in rivers for flood detection? CO2K6  
a) Temperature sensor                      b) Humidity sensor                      c) Water level sensor                      d) Motion sensor
5. What is the first step in IoT design methodology? CO3K1  
a) Process specification                      b) Purpose and requirements specification  
b) C) Domain model specification                      d)Testing

6. In IoT design, the process specification focuses on \_\_\_\_\_.
- 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

CO3K1

**Part B**

**3 x 6 = 18**

**Answer ALL questions**

**The answer should not exceed 400 words or two pages**

7. a. Explain about Physical and Logical Design of IoT  
(or)  
7. b. Describe how cloud computing contributes to the functioning of IoT.
8. a. Discuss about smart lighting.  
(or)  
8. b. Describe how smart parking applications enhance urban living and safety.
9. a. Discuss about purpose and requirements of IoT design.  
(or)  
9. b. Explain about process specification.

CO1K2

CO1K3

CO2K4

CO2K3

CO3K4

CO3K2

**Part C**

**3 x 12 = 36**

**Answer ALL questions**

**The answer should not exceed 800 words or four pages**

10. a. Explain about Communication models.  
CO1K2  
(or)  
10. b. Explain about IoT enabled technologies
11. a. Explain about Home Automation System with circuit diagram and code  
(or)  
11. b. Explain any two IoT applications in smart cities.
12. a. Explain the IoT design methodology.  
(or)  
12. b. Explain briefly about Domain model specification.

CO1K2

CO2K6

CO2K4

CO3K4

CO3K2

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**Staff in charge:** Dr.M.Krishnaveni

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**Number of copies: 65**

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