



Avinashilingam Institute for Home science and Higher Education for Women
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)
Re-accredited with A++ Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India
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Continuous Internal Assessment Test I – February 2025
SEMESTER II

Class : I PG
Major : Information Technology

Time : 2 hours
Max.marks: 60

23MITC07 Internet of Things

CO1: Interpret the fundamental functionalities of IoT and enabling technologies.

CO2: Understand the significance of sensors and microcontrollers.

CO3: Gain knowledge about the protocols of IoT.

CO4: Identify the importance of Cloud for IoT

CO5: Integrate real world day-to-day applications with IoT systems.

Part A

6 X1 =6

Choose the correct answer

1. In the IoT stack, which layer handles data communication between devices and ensures interoperability? CO1 K2
a. Perception Layer b. Network Layer
c. Application Layer d. Transport Layer
2. Which of the following enabling technologies plays a key role in real-time data processing for IoT systems? CO1 K2
a. RFID b. Blockchain c. GPS d. Cloud Computing
3. Which architecture is utilized in the ARM microcontroller, known for its efficiency in embedded systems? CO2 K2
a. CISC b. RISC c. MIPS d. x86
4. Which sensor is commonly used for detecting motion in security systems? CO2 K2
a. Resistive Sensor b. Pressure sensor c. Capacitive Sensor d. Infrared sensor
5. Which sensors are ideal for monitoring both environmental conditions and activity in smart homes? CO3 K2
a. Temperature and Motion b. Light and Proximity
c. Gas and Humidity d. Sound and Vibration
6. Which IoT messaging protocol uses a publish-subscribe model and is optimized for low-power devices? CO3 K2
a. HTTP b. MQTT c. XMPP d. POP3

Part B

3 x 6 = 18

Answer the following

Each answer should not exceed 400 words or two pages

7. a. Discuss the concept and significance of 'Things' in IoT. (Or) CO1 K4
b. Identify the IoT level for a system where a single node performs sensing, storage, and analysis with minimal complexity. CO1 K4
8. a. Explain the role of different sensors in a smart IoT home. CO1 K4
(Or) CO2 K4
b. Discuss why ARM processors are widely used in IoT devices? CO2 K4

