



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
Coimbatore – 641 043

Continuous Internal Assessment Test II – April 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

- Which of the following is NOT a part of the IPv4 header? CO3 K2
 - Source Address
 - Destination Address
 - Flow Label
 - Time to Live (TTL)
- What does a Uniform Resource Identifier (URI) primarily identify? CO3 K2
 - Only web pages
 - A resource on the internet
 - Only file paths
 - An IP address
- Which of the following is a key benefit of using cloud services for IoT applications? CO4 K2
 - Increased manual data processing
 - Limited scalability for connected devices
 - Remote access and real-time data analytics
 - Higher hardware dependency at the user end
- Which of the following is a primary advantage of fog computing in IoT? CO4 K2
 - Reduces latency by processing data closer to the source
 - Eliminates the need for cloud storage
 - Replaces the internet in IoT communication
 - Increases dependency on centralized servers
- In an IoT-based elderly fall detection system, which type of sensor is commonly used to detect sudden motion changes? CO5 K2
 - Temperature sensor
 - Accelerometer sensor
 - Pressure sensor
 - Proximity sensor
- In a smart retail IoT system, which technology is commonly used for real-time inventory tracking? CO5 K2
 - RFID
 - GPS
 - LiDAR
 - Infrared Sensors

Part B

3 x 6 = 18

Answer the following

Each answer should not exceed 400 words or two pages

- Depict the structure of the IPv4 protocol frame format with a labeled diagram. (Or) CO3 K4
 - Explain the role of a Uniform Resource Identifier (URI) in the Internet of Things (IoT). How does it help in identifying and accessing IoT resources? Provide an example. CO3 K4

