



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

Master's Degree Examination – June / July 2021

II Semester

Class : I PG

Major : Information Technology

Time : 3 Hours

Max.Marks:100

20MITC07 Internet of Things

Part- A

10x1=10

Choose the Correct Answer

- _____ is not main element of IoT
a. People b. Process c. Security d. Things CO1K1
- IoT is an advanced automation and analytics system which deals with?
a. sensor, networking b. electronic CO1K2
c. cloud messaging d. All the above
- Which of these statements regarding sensors is TRUE? CO2K2
a. Sensors are input devices
b. Sensors can be analog as well as digital
c. Sensors respond to some external stimuli
d. All the above
- Why is IPv6 preferred over IPv4 for IoT implementations? CO2K2
a. Larger addressing range b. More security
c. Both a and b d. Neither a or b
- MQTT stands for _____ CO3K1
a. MQ Telemetry Things b. MQ Transport Telemetry
c. MQ Transport Things d. MQ Telemetry Transport
- Which protocol is lightweight? CO3K2
a. HTTP b. CoAP c. MQTT d. SPI
- Which of the following is not a sensor? CO4K2
a. Barometer b. Light Dependent Resistor (LDR)
c. DHT d. Relay
- Which of the following option allow us to monitor the application. CO4K1
a. Boot b. Endpoint c. Actuators d. Hypermedia
- Number of I/O ports in the 8051 microcontroller? CO5K2
a. 2 b. 3 c. 4 d. 5
- Which is the future application of IoT? CO5K1
a. QoS in communication b. Role of green IoT system
c. Secure communication d. Multimedia communication

Part – B
Answer ALL questions
Each answer should not exceed 400 words or two pages

5x6=30

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|--|------|----------------|
| 11. a. Identify the various challenges in IoT. | (or) | CO1K2 |
| 11.b. List out the things in IoT domain. | | |
| 12.a. Write a note on 8051 Microcontroller. | (or) | CO1K1
CO2K4 |
| 12.b. Construct the various types of sensors. | | |
| 13.a. What do you meant by Li-Fi. | (or) | CO2K3
CO3K2 |
| 13.b. Write about frame format of IPV4 protocol. | | CO3K4 |
| 14.a. Why we need of IoT security? Justify. | (or) | CO4K5 |
| 14.b. Categorize the role of Cloud computing in IoT. | | CO4K4 |
| 15.a. Write short note on application to monitor water quality in IoT. | | CO5K4 |
| | (or) | |
| 15.b. Explain with example on Fall detection with IoT Sensors. | | CO5K3 |

Part – C
Answer ALL questions
Each answer should not exceed 800 words or four pages

5x12=60

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| 16.a. Demonstrate the various characteristics and levels in IoT. | (or) | CO1K3 |
| 16.b. Discuss about applications and enabling technologies in IoT. | | CO1K2 |
| 17.a. What is a sensor? Explain its working with example. | (or) | CO2K3 |
| 17.b. Evaluate the process of ARM. | | CO2K5 |
| 18.a. Discuss on MQTT protocol in IoT. | (or) | CO3K2 |
| 18.b. Outline the importance of Constrained Application Protocol. | | CO3K4 |
| 19.a. Explain the IoT with Cloud and challenges. | (or) | CO4K4 |
| 19.b. Simulate the function of Fog computing in IoT. | | CO4K3 |
| 20.a. Demonstrate on IoT based smart driver Assistant system. | | CO5K3 |
| | (or) | |
| 20.b. What effect will the IoT have in healthcare? Express. | | CO5K5 |
