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GIET MAIN CAMPUS AUTONOMOUS GUNUPUR – 765022

B. Tech Degree Examinations, June - 2021

(Sixth Semester)

BCSOE6050 / BITOE6050 - INTERNET OF THINGS

(Common to C.S.E and I.T)

Time: 2 hrs

Maximum: 50 Marks

Answer ALL Questions**The figures in the right hand margin indicate marks.****PART – A: (Multiple Choice Questions)****(1 x 10 = 10 Marks)**

<u>Q.1. Answer ALL questions</u>	[CO#]	[PO#]
a. Industry 4.0 standard build on? (i) Cloud Computing (ii) IoT (iii) Networks (iv) All the above	4	1
b. What is XaaS (i) Anything as a Service (ii) Everything as a Service (iii) Thing as a Service (iv) Many thing as a Service	3	1
c. Arduino IDE consists of two functions. What are they? (i) Build() and loop() (ii) Setup() and build() (iii) Setup() and loop() (iv) Loop() and build() and setup()	1	1
d. What is SaaS (i) Service as a Service (ii) Soft as a Service (iii) Session as a Service (iv) Software as a Service	3	1
e. Which of the following is false with respect to UDP? (i) Connection-oriented (ii) Unreliable (iii) Transport layer protocol (iv) Low overhead	2	1
f. The Internet of Things will run on many communication standards. Which of these is not standard body of protocol (i) Zigbee (ii) AllSean (iii) Tyrell (iv) Z-Wave	2	1
g. What is the size of IPv6 Address? (i) 32 bits (ii) 128 bits (iii) 48 bits (iv) 64 bits	2	1
h. Communication offered by TCP is _____ (i) Full-duplex (ii) Half-duplex (iii) Semi-duplex (iv) Byte by byte	2	1
i. _____ best describes the MQTT protocol. (i) Device - to - Device (D2D) (ii) Request/Response (iii) Publish/Subscribe (iv) Broadband	2	1
j. What are the distributions are supported by Raspberry Pi? (i) Arch Linux (ii) Debain (iii) Fedora Remix (iv) Arch Linux, Debain & Fedora Remix	1	1

PART – B: (Short Answer Questions)**(2 x 5 = 10 Marks)**Q.2. Answer ALL questions

	[CO#]	[PO#]
a. What is piconet in Bluetooth?	3	1
b. What is the difference between security and Privacy?	4	1
c. What is an embedded system? How it is related to IoT?	2	1
d. What is the advantage of IPv6 over IPv4?	2	1
e. Differentiate between HTTP, HTTPS and SSH?	2	1

PART – C: (Long Answer Questions)**(6 x 5 = 30 Marks)**Answer ANY FIVE questions

	Marks	[CO#]	[PO#]
3. Explain the Architecture of IoT with brief explanation of each components.	(6)	1	1
4. Is cloud an important component of IoT? Can't we create an IoT infrastructure without the cloud? Explain with suitable justification	(6)	4	1
5. Explain the working principal of TCP. State the Advantages of TCP over UDP	(6)	2	1
6. Explain the Physical and MAC frame and frame types of ZigBee protocol in detail.	(6)	2	1
7. Differentiate between IoV and IIoT. Explain in detail the significance of IoV and IIoT.	(6)	4	1
8. What is M2M protocol? Explain the functionality of MQTT.	(6)	2	1
9. Explain the deep sleep concept of IoT. Explain with example.	(6)	1	1
10. Explain the hardware components of Raspberry Pi? State the setup phase of Raspberry Pi.	(6)	2	1

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