

**B. Tech./ IT/EVEN/SEM 8/R\_18/IT802C/2021-2022**  
**YEAR: 2022**

## **Internet of Things**

### **IT 802C**

**TIME ALLOTTED: 3 HOURS**

**FULL MARKS: 70**

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable*

**GROUP – A**  
**(Multiple Choice Type Questions)**

1. Answer any **ten** from the following, choosing the correct alternative of each question: **10×1=10**

SL	Question	Marks	CO	Blooms Taxonomy Level
(i)	On what is MQTT based upon? A. Publish Subscribe Architecture B. Client Server Architecture C. Both a & b D. None	1	1	L1
(ii)	What role of the cloud in smart grid architecture is? A. Collect data B. Manage data C. Security D. Store data	1	1	L1
(iii)	Which type of elements helps in streaming XMPP? A. XHL B. XPL C. MPL D. XML	1	2	L2
(iv)	Identify the language preferred for IoT analytics. A. Python B. HTML C. PHP D. C++	1	1	L3
(v)	MAC addresses are used in the form of _____. A. IP addresses B. Network address C. Burned in address D. Hardware address	1	3	L1

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	(vi)	Total types of voice communications in IoT environment is?	1	2	L2
		A. 1			
		B. 2			
		C. 3			
		D. 4			
L2	(vii)	_____ introduced the Wind River:	1	1	L2
		A. Intel			
		B. IBM			
		C. Syntel			
		D. Tech Mahindra			
L2	(viii)	SLA stands for _____	1	2	L2
		A. System local area			
		B. Service local area			
		C. System-level argument			
		D. Service level argument			
	(ix)	IRC is an abbreviation for _____:	1	3	L3
		A. Interconnect Reduce Chat			
		B. Internet Relay Chat			
		C. Interconnection Relay Chat			
		D. Internet Reduce Chat			
	(x)	Among the following layers, identify the one which is used for wireless connection in IoT devices	1	2	L1
		A. Data link Layer			
		B. Transport Layer			
		C. Network Layer			
		D. Application Layer			
	(xi)	Which network does a sensor use?	1	4	L2
		A. PAN and LAN			
		B. PAN and HAN			
		C. HAN and LAN			
		D. HAN, PAN, and LAN			
	(xii)	UDP and TCP are called _____ protocols:	1	4	L1
		A. Network			
		B. Transport			
		C. Session			
		D. Application			

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**GROUP – B**  
(Short Answer Type Questions)  
(Answer any three of the following) 3 x 5 = 15

SL	Question	Marks	CO	Blooms Taxonomy Level
2.	(i) Compare TCP and UDP	2	1	L2
	(ii) Differentiate between Logical and physical design of IoT	3	2	L2
3.	(i) In what ways is IoT energy efficient?	3	1	L3
	(ii) Summarize the various applications of IoT	2	2	L3
4.	What is the difference between business IOT and IIOT?	5	3	L2
5.	(i) What are the challenges to the widespread use of IoT?	2	1	L3
	(ii) List out the features of function model	3	1	L2
6.	(i) Identify the purpose of Data Preprocessing	3	1	L3
	(ii) Define cloud computing	2	1	L2

**GROUP – C**  
(Long Answer Type Questions)  
(Answer any three of the following) 3 x 15 = 45

SL	Question	Marks	CO	Blooms Taxonomy Level
7.	(i) How does the Internet of Things (IoT) affect our everyday lives?	8	1	L3
	(ii) How does IOT work?	7	2	L2
8.	(i) Cite the various M2M/IoT device types and explain their characteristics and the deployment scenarios.	8	3	L2, L3
	(ii) Explain the Remote control operation of energy consuming devices	7	2	L3
9.	(i) How does the community assist in the development of IoT?	10	2	L2
	(ii) What are the types of data that can be communicated	5	4	L3

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between IoT devices?

10.	(i)	Explain the various emerging IoT applications.	7	1	L3
	(ii)	Describe the different components of IOT	8	1	L3
11.		Write Short Notes (Any Three) 3*5=15			
	a)	Challenges in World Of IoT	5	2	L3
	b)	DCCP	5	3	L2
	c)	IEEE 802.11	5	2	L3
	d)	AMQP	5	1	L3
	e)	Big Data and Serialization	5	2	L3