St. Philomena's College (Autonomous), Mysore
PG Department of computer science
Question Bank (Revised Curriculum 2018 onwards)
Second year- Fourth Semester (2018 -20 Batch)
Internet of things QP Code: 56301

Unit	SI. No	Questions	Marks
1	1.	Define IOT.	2
1	2.	What is web3.0 view of IOT?	2
1	3.	Mention any two protocols for SCADA and RFID each	2
1	4.	What are the 2 main issues in IOT standardization?	2
1	5.	What is unification of data standards?	2
1	6.	What is ubiquitous iot ?	2
1	7.	What is the use of middleware in iot?	2
1	8.	Give the applications of iot in different domains.	2
1	9.	Define goal of IOT	2
1	10.	Draw simplified IOT architecture	2
1	11.	What are the layers of iot architecture?	2
1	12.	What is ubiquitous IOT?	2
1	13.	Define middleware of iot	2
1	14.	List the four pillars of IOT	2
1	15.	Define M2M	2
1	16.	Define web 3.0	2
1	17.	Abbreviate SCADA, M2M,WSN,RFID	2
1	18.	List the types of physical attacks	2
1	19.	List the types of application attacks	2
1	20.	List the type of network attacks	2
1	21.	Define iot ?	2
2	22.	Compare iot and wot.	2
2	23.	What is mobile cloud computing?	2
2	24.	Name few cloud providers.	2
2	25.	What is web portal? Name any two.	2
2	26.	What is cloud computing?	2

2	27.	What are the components of cloud model given by NIST?	2
3	28.	What are the problematic aspects in cost benefit analysis and sharing?	2
3	29.	What are collective benefits?	2
3	30.	What are manufacturers and suppliers benefits?	2
3	31.	What are distributors and logistics benefits?	2
3	32.	What are retailer benefits?	2
3	33.	What are the benefits of RFID and IOT to society?	2
3	34.	What is business model?	2
3	35.	Mention the laws of information in business model innovation.	2
3	36.	What is small world phenomenon?	2
4	37.	Mention IEC standards related to electric vehicle charging.	2
4	38.	Define agility and autonomy.	2
4	39.	Mention the advantages of smart grid.	2
4	40.	Mention the agility enablers.	2
4	41.	Define intelligent product.	2
4	42.	What is clustering?	2
4	43.	What are properties that a software entity should possess?	2
4	44.	Define intelligent agents and autonomous agents.	2
1	45.	Give introduction to IOT with its applications in real life.	5
1	46.	What are vertical IOT applications?	5
1	47.	What are the 4 pillars of IOT?	5
1	48.	What is communication middleware for IOT?	5
1	49.	Give brief overview of IoT	5
1	50.	Why we need of IoT Security	5
1	51.	Explain issues in IoT security	5
1	52.	What is requirement of IoT Protocol Standardization?	5
1	53.	Explain different Characteristics of IoT	5
2	54.	What is platform middleware for wot?	5
2	55.	Mention the building blocks in ETSI M2M framework.	5

2	56.	What are the 5 parts of ISA 95 standard for SCADA?	5
2	57.	Explain the unified multitier wot architecture.	5
2	58.	Explain WoT with example	5
2	59.	Explain Two Pillars of the Web.	5
3	60.	What is small world phenomenon?	5
3	61.	What is cost benefit sharing?	5
3	62.	Explain decentralized search.	5
3	63.	Write a short note on Business Model	5
3	64.	Who is the business model for? Describe it	5
4	65.	What are the key functionalities required to enable the interaction between intelligent items? Explain.	5
4	66.	What are the characteristics of autonomy? Explain.	5
4	67.	What are the important properties studied in wireless protocols?	5
4	68.	Write a note on data synchronization.	5
1	69.	Write a note on M2M middleware	7
1	70.	Write a note on SCADA middleware.	7
1	71.	Explain four Pillars of IoT and how they are inter-connected with each other?	7
1	72.	What are different challenges of IoT?	7
1	73.	Explain wireless sensor network?	7
1	74.	Explain different types of sensors used in IoT applications	7
1	75.	Briefly explain about M2M and Wsn protocols	7
2	76.	Give the key elements of ETSI m2m architecture	7
2	77.	Give the web services, service specification and ubiquitous sensor networks components given by SWE of OGC.	7
2	78.	What are different Platform Middleware for WoT?	7
2	79.	Explain the architecture of cloud of things	7
2	80.	How are iot and cloud computing related?	7
3	81.	What are the 4 different approaches towards systemization of RFID benefits?	7
3	82.	What are the requirements that constitute the specifics for the value proposition in IOT?	7
3	83.	Explain the economy with network effects.	7
3	84.	What are the network effects in integrated iot	7
3	85.	What is WoT Portals and Business Intelligence?	7

3	86.	Define Business model. What are the factors to make business model.	7
1	87.	Briefly explain about M2M and Wsn protocols	10
1	88.	Explain is DNA of IOT?	10
1	89.	Mention the applications of ubiquitous IOT applications	10
1	90.	Give the overview of middleware for IOT.	10
1	91.	Write a note on RFID and WSN middleware.	10
1	92.	Summarize the iot protocol standardization effort.	10
1	93.	What is Internet of Things (IoT). What are components required to design IoT Device and which device we called IoT device explain with example	10
1	94.	What are different components required for IoT device?	10
1	95.	What effect will the internet of things (IoT) have on our daily lives? Explain with any one example of smart device.	10
1	96.	What are different IoT protocols?	10
1	97.	Explain in details IoT Architecture layers.	10
2	98.	Explain the architecture standardization in iot.	10
2	99.	Write a note on cloud of things.	10
2	100.	Write a brief note on cloud middleware	10
2	101.	Difference between Web of Things versus Internet of Things	10
3	102.	What do you mean by cascading behavior in networks?	10
3	103.	How do you estimate the cost of RFID and IOT?	10
3	104.	Write a note on business model innovation?	10
3	105.	Explain the economy without network effects.	10
3	106.	Write a note on diffusion in networks.	10
3	107.	What is 6 degrees of separation?	10
3	108.	Explain information cascades	10
3	109.	Explain population model	10
4	110.	Explain data synchronization in detail.	10
4	111.	What are the 3 phases of charging electric vehicle?	10

4	112.	What effect will the internet of things (IoT) have in healthcare? Explain with any one example of smart device.	10
4	113.	Explain with example: Wearable - Smart Cities- Smart Home – Smart Healthcare Agriculture - Smart Grid.	10
4	114.	Explain IoT Application and Deployment Scenarios in different domains	10
4	115.	Explain what are the components and Communication media required for making smart building	10
4	116.	As technology gets smarter, will our abilities to think, feel and act be affected?	10
4	117.	What decisions can or cannot be delegated to smart things?	10

****

Question Paper Pattern- Blue Print

PART A		
1	**Answer any FIVE of the following**	**5x2=10**
a	Unit 1	
b	Unit 1	
c	Unit 2	
d	Unit 2	
e	Unit 3	
f	Unit 4	
g	Unit 4	
PART B		
Answer any ONE FULL question from the following		**4x15=60**
Module 1		
2	Unit 1	
	OR	
3	Unit 1	
Module 2		
4	Unit 2	
	OR	
5	Unit 2	
Module 3		
6	Unit 3	
	OR	
7	Unit 3	
Module 3		
8	Unit 4	
	OR	
9	Unit 4	