VASAVI COLLEGE OF ENGINEERING (Autonomous) IBRAHIMBAGH, HYDERABAD-500051 DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Name of the Course: INTERNET OF THINGS

ASSIGNMENT - 1

Name of the Faculty: **S Vinay Kumar** Date of Submission: **05-03-24**

Class: **B.E. 3/4** Time: **09.40 AM -10.40 AM**

Section: A
Sem: VI

Academic Year: 2023-24

Set-I (1602-21-733-005,012,013,020,026,029,032,036,037,063)

		Mar	BTL	Maj	pped
Q.No.	Description of the Question	ks	(1/2/3/ 4/5/6)	CO	PO
1	Refer to this paper and describe standards and challenges in IoT. Internet of Things is a revolutionary approach for future technology enhancement: a review, Kumar, Sachin & Tiwari, Prayag & Zymbler, Mikhail. Journal of Big Data. 6. 10.1186/s40537-019-0268-2.	2	4	1	1,2
2	Refer to the architecture & case study of Padova city and suggest the changes to be incorporated to suit our city. Internet of Things for Smart Cities, IEEE Internet of Things Journal	3	4	1	1,2

SET-II (1602-21-733-001 to 004, 006,007,008)

		Mor	Mar ks BTL (1/2/3/ 4/5/6)	Maj	pped
Q.No.	Description of the Question	_		CO	PO
1	Study the paper and differentiate M2M and IoT. Describe the challenges in moving into IoT. The evolution of M2M into IoT, IEEE	3	4	1	1,2
2	Refer to this paper "A systematic review on Deep Learning approaches for IoT security" and describe the techniques being adopted to provide security at the device level and router level. https://dl.acm.org/doi/10.1016/j.cosrev.2021.100389	2	4	1	1,2

SET-III (1602-20-733-009 to 011, 014 to 017)

		Mar	BTL	Maj	pped
Q.No.	Description of the Question	ks	(1/2/3/ 4/5/6)	CO	PO
1	Study the paper below and explain, Why Should IoT Care about IPv6?	5	4	1	1,2
	Internet of Things (IoT): Architecture and design, IEEE				

SET-IV (1602-21-733-018,019,021 to 025)

		Mar	BTL	Maj	pped
Q.No.	Description of the Question	ks	(1/2/3/	CO	PO
		IX.3	4/5/6)		
1	Study the paper and answer the following. Why cloud computing serves as an efficient paradigm for implementing IoT back-ends? How does the architecture improve in precision based agriculture? An Adaptive Cloud-Based IoT Back-end Architecture and Its Applications, IEEE	5	4	1	1,2

SET-V (1602-21-733-027 to 028, 030,031, 033 to 035)

		Mar	BTL	Maj	pped
Q.No.	Description of the Question	ks	(1/2/3/ 4/5/6)	CO	PO
1	Refer to the paper below and determine the appropriate middleware that can be utilized for agriculture IoT. Middlewares for smart objects and smart environments: overview and comparison. In: Fortino G, Trunfio P (eds) Internet of things based on smart objects—technology, middleware and applications. Springer International Publishing, Heidelberg	5	4	1	1,2

SET-VI (1602-21-733-038 to 044)

		Mar	BTL	Maj	pped
Q.No.	Description of the Question	ks	(1/2/3/ 4/5/6)	CO	PO
	Study the white paper and explain the emerging IoT-5G scenario.				
1		5	4	1	1,2
	Internet of Things (IoT) in 5G Wireless Communications, IEEE				

SET-VII (1602-21-733-046 to 049 051, 052 to 054)

		Mar	BTL	Maj	pped
Q.No.	Description of the Question	ks	(1/2/3/	CO	PO
		KS	4/5/6)		
	Study the below paper and infer how cyber-physical systems help				
	mankind in health sector.				
1		5	4	1	1,2
	Cyber-Physical Systems. Innovation engine for mobility, health,				
	energy and production, Springer				

SET-VIII (1602-21-733-055 to 061)

		Mor	Mar BTL	Maj	pped
Q.No.	Description of the Question	ks	(1/2/3/	CO	PO
1	Study the document and determine, How CPS can help in telemedicine, remote diagnosis and home care support? Living in a networked world—integrated research agenda cyber-physical systems (agendaCPS). acatech Study. Herbert Utz Verlag, Munich	5	4/5/6)	1	1,2

SET-IX (1602-21-733-062, 064 to 067, 135, 136)

		Mar	BTL	Maj	pped
Q.No.	Description of the Question	ks	(1/2/3/ 4/5/6)	CO	РО
1	Study the paper and determine the sources of energy harvesting and also write the applications of it.	5	4	1	1,2
	Energy harvesting in IoT devices: A survey, IEEE				

SET-X (1602-21-733-301 to 307)

		Mar	BTL	Maj	pped
Q.No.	Description of the Question	ks	(1/2/3/	CO	PO
		N3	4/5/6)		
	Study the white paper and determine the challenges associated				
	with rapid urbanization.				
1		5	4	1	1,2
	TCS Innovation Labs- Intelligent Cities: A City Process				
	Management Approach (white paper).				