

# SRI BHARATHI

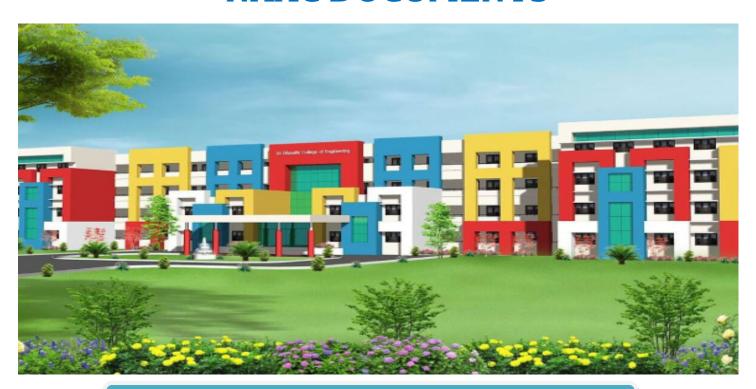
ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Kaikkurichi, Pudukkottai -622 303

www.sbec.edu.in

# **NAAC DOCUMENTS**



Quality Indicator Frame Work

# Criterion – 1 CURRICULAR ASPECTS

Submitted by

IQAC
Internal Quality Assurance Cell

Sri Bharathi Engineering College for Women

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25
KAIKKURUCHI, PUDUKOTTAI – 622 303
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### **ACADEMIC YEAR 2022-2023 / ODD SEMESTER**

#### 1.2 Academic Flexibility (30)

1.2.1 Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

#### **AND**

1.2.2 Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

VAC Title:	INTERNET OF THINGS	NTERNET OF THINGS WITH PYTHON									
Resource Person:	Resource Person: Dr.K.Gurunathan M.E Ph.D Trainer Meck Teck Research Foundat	ion	Resource Person: Mr.Kamalakannan Trainer Galwin Technology								
Date of conduct from	: 03.08.2022(IV&III) 22.08.2022(II)	To:	10.08.2022( I 26.08.2022(I		<b>Duration:</b>	30 Hrs					
<b>Organized Departmen</b>	nt: COMPUTER SCIENCE	AND ENG	GINEERING								
Participant Year:	4,3&2(CSE), 2(EEE) Semeste	r: ODD	No. of Stud	lents Reg	istered :	74					
Venue:	Auditorium										

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#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### ACADEMIC YEAR 2022-2023 / ODD SEMESTER

Date: 26 / 07 /2022

#### **DEPARTMENT CIRCULAR**

A Value added course on "Internet of Things with Python" will be conducted by MECK TECK Research Foundation, Pudukkottai in the college campus for all Third year and Final year CSE students from 03.08.2022 to 10.08.2022. Certificates will be issued to all the participants at the end of the Course.

S.No.	Name of the Course	Resource Person
1.	Internet of Things With Python	Resource Person: 1. Dr.K.Gurunathan M.E Ph.D Master Trainer MECK TECK Research Foundation

Cc:

· Principal's office

IQAC Coordinator

Class In charge-III,IV year

CSE Students – III,IV year

Notice Board

Dr. S.THILAGAVATHIM.A., Ph.D.,

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkotta. Dt. HOD / CSE HOD / CSE

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN KAKKURICHI,

PUDUKKOTTAI - 622 303



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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING ACADEMIC YEAR 2022-2023 / ODD SEMESTER

# Value Added Course on "INTERNET OF THINGS WITH PYTHON" SYLLABUS

S.NO	TOPIC COVERED	DURATION (in hours)	DATE FN/AN
1	Understanding IoT fundamentals - IOT Architecture and protocols	3	03.08.2022
2	Various Platforms for IoT - Real time Examples of IoT	3	03.08.2022
3	Arduino Uno Architecture - Setup the IDE, Writing Arduino Software - Arduino Libraries	3	04.08.2022
4	Overview of IoT components and IoT Communication Technologies - Challenges in IOT	3	04.08.2022
5	Basics of Embedded C programming for Arduino	3	05.08.2022
6	Interfacing LED, push button and buzzer with Arduino	3	05.08.2022
7	Interfacing Arduino with LCD	3	08.08.2022
8	Overview of Sensors working - Analog and Digital Sensors	3	08.08.2022
9	Interfacing of Temperature, Humidity, Motion, Light and Gas Sensor with Arduino	3	09.08.2022
10	Interfacing of Actuators with Arduino	3	09.08.2022
11	Interfacing of Relay Switch and Servo Motor with	3	10.08.2022
12	Arduino M2M vs. IOT - Communication Protocols	3	10.08.2022
	Total Periods :	36	

VAC Coordinator

Dr. S.THILAGAVATHI M.E., Ph.D.,
PRINCIPAL

SRI BHARATHI ENGINEERING COLLEGE FOR 1411 Kaikkurch: - 622 303, Pauding...... Dt. ZHOD / CSE
SRI BHARATHI ENGINEERING
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KAIKKURICHI,
PUDUKKOTTAI - 622 303



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# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

# ACADEMIC YEAR 2022-2023 (ODD SEM) STUDENTS PARTICIPATION LIST-VAC PROGRAM

## **INTERNET OF THINGS WITH PYTHON**

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S.NO	REG.NO	NAME OF THE STUDENT	YEAR/BRANCH
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3201/1	912620104001	AKALYA S	III/CSE
2.	912620104002	HEMA V	III/CSE
3.	912620104003	ISWARYA R	III/CSE
4.	912620104004	KALAIVANI S	III/CSE
5.	912620104005	KALPANA K	III/CSE
6.	912620104007	MEIYYAMMAL M	III/CSE
7.	912620104008	NANDHINI P	III/CSE
8.	912620104009	PRASANNA DEVI P	III/CSE
9.	912620104010	PRISHIYA E	III/CSE
10.	912620104012	ROSAMMAL M	III/CSE
111.	912620104013	ROSHIKA K	III/CSE
12.	912620104014	SABHA AYSHA S	III/CSE
13.	912620104015	SATHIYASRI P	III/CSE
14.	912620104016	SIVAGAMI D	III/CSE
15.	912620104017	SIVAHARINI S	III/CSE
16.	912620104018	SUBASHINI C	III/CSE
17.	912620104019	SUBASHINI M	III/CSE
18.	912620104020	SWETHA D  Dr. S.THILAGAVATHI M.E.	III/CSE

PRINCIPAL
SRI BHARATHI ENGINEEDING
COLLEGE FO:
Kaikkurchi - 822 500, Fuuting Jul. DI.

veikiurchi - 622 303, Pudukkollai Di

19.	912620104021	VANATHI T	III/CSE
20.	912620104022	VINCIYA MARY S	III/CSE
21.	912620104304	VAISHNAVI R	III/CSE
22.	912619104001	ANNAPOORANI M	IV /CSE
23	912619104003	ARUNNAVAMEENA A	IV/CSE
24	912619104004	DAYANA P	IV/CSE
25	912619104005	DHARSHINI D	IV/CSE
26	912619104007	FAHMIDHA B	IV/CSE
27	912619104009	GULNAS FATHIMA S	IV/CSE
28	912619104010	HELAN J	IV/CSE
29	912619104011	KEERTHANA R	IV/CSE
30	912619104012	MUTHULAKSHMI G	IV/CSE
31	912619104013	MUTHU MEENAKSHI M	IV/CSE
32	912619104014	NIROSHIKA R	IV/CSE
33	912619104017	PARAMESHWARI S	IV/CSE
34	912619104019	RANJANI K	IV/CSE
35	912619104020	RILWANA PARVEEN J	IV/CSE
36	912619104021	ROOPINA R	IV/CSE
37	912619104022	SANDHIYA B	IV/CSE
38	912619104023	SANTHI D	IV/CSE
39	912619104024	SARANYA C	IV/CSE
40	912619104027	SNEHA R	IV/CSE
41	912619104029	SURIYA JOTHI S	IV/CSE
42	912619104301	ABINAYA S	IV/CSE

Dr. S.THILAGAVAFFI N.E., Ph.D.,
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HoD/CSE SRIBHARATHIENGINEERING COLLEGE FOR WOMEN KAIKKURICHI, PUDUKKOTTAI - 622 303



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#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR 2022-2023 (ODD SEM)

### ATTENDANCE SHEET FOR VALUE ADDED COURSE-INTERNET OF THINGS WITH PYTHON

s.no	REG.NO	NAME OF THE	YEAR/		TE: 08.22		TE: 8.22	\	TE: 8.22		TE: 08.22		TE: 08.22		TE:	NO OF SESSIONS	SIGNATURE OF THE
20	932620104304	STUDENT	BRANCH	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	ATTENDED	STUDENT
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2	912620104002	HEMA V	III/CSE	1	,	1	1	. 1	1	1	1	1	1	1	1	12	atw
3	912620104003	ISWARYA R	III/CSE	1	1	1	1	1	1	1	1	1	1	1	,	12-	tehnt
4	912620104004	KALAIVANI S	III/CSE	1	)	)	)	1	1	1	1	1	,	1	1	12	Kelan Vanni.
5	912620104005	KALPANA K	III/CSE	ſ	,	1	1	1	1	1	1	1	1	1	1	12	KKaff
6	912620104007	MEIYYAMMAL M	III/CSE	1	1	1	)	1	1	V	1	1	,	,	,	12	M. Mary
7	912620104008	NANDHINI P	III/CSE	,	1	1	,	1	1	1	1	1	1	Commen	1	12	Stal.
8	912620104009	PRASANNA DEVI P	III/CSE	1	1	1	)	1	1	1	1	/	1	1	1	12	Prasinat
9	912620104010	PRISHIYA E	III/CSE	1	1	1	1	1	1	1	,	1	1	1	1	12	Prist-
10	`912620104012	ROSAMMAL M	III/CSE S.THILAGA	vati	IVM.E	Ph.[	)	(	7	1	1.	1	1	1	)	12	Roman .

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11	912620104013	ROSHIKA K	III/CSE	1	1	1	1	1	1	1	1	1	1	1	1	12	K. Rostita
12	912620104014	SABHA AYSHA S	III/CSE	1	1	1	1	1	1	1	1	1	1	1	1	12	S. Solly.
13	912620104015	SATHIYASRI P	III/CSE	. (	)	1	1	1	1	1	1	1	1	1	1	12	B. Sath. yn-
14	912620104016	SIVAGAMI D	III/CSE	1	)		/	1	1	1	1	1	ſ	1	1	12	Day
15	912620104017	SIVAHARINI S	III/CSE	1	1	1	1	1	1	1	1	/	1	1	1	12	Spir
16	912620104018	SUBASHINI C	III/CSE	1	)	1	1	1	1	1	,	,	,	,	1	12	C. Subai
17	912620104019	SUBASHINI M	III/CSE	1	1	1	1	1	1	1	1	1	1	,	1	12	Mach.
18	912620104020	SWETHA D	III/CSE	1/	1	1	)	1	1	,	,	1	1	1	1	12	Doswetto
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23	912619104003	ARUNNAVAMEENA A	IV/CSE	1	/	1	1	1	1	1	1	1	1	1	/	12	Army.
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Dr. S.THILAGAVATHI M.E., Ph.D.,
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SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.

HOD/CSE HOD/CSE SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI,

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

## Report on Value Added Course

Title:

Internet of Things With Python

Resource Person:

Dr.K.Gurunathan M.E Ph.D

Trainer

Meck Teck Research Foundation

Date of conduct from:

03.08.2022

To: 10.08.2022

Duration:

30 Hours

Organized Department:

Computer Science and Engineering

Participant Year:

3,4(CSE)

Semester: **ODD** 

No. of Students Registered:

42

Venue:

Auditorium

#### Outcome of Value Added Course (VAC)

#### At the end of the VAC course the student can able to

- Explain fundamentals about IoT
- Illustration of IoT Access technologies
- Design methodology and different IoT hardware platforms.
- Identify with the application areas of IOT
- Realize the revolution of Internet in Mobile Devices, Cloud & Sensor Networks
- Describe the building blocks of Internet of Things and characteristics.

#### Assessment Process

- Students securing more than 60% on total score and secured more than 75% in attendance is eligible to receive the certificate for the VAC course conducted
- Total Score = (0.5 \*Attendance in VAC out of 100 percentage + 0.5 \*Test mark in VAC out of 100 marks)

VAC Coordinator

Hod/CSE

Principal

SRI BHARATHI ENGINEERI COLLEGE FOR WOMEN

KAIKKURCHI - \$22 303. PUDUKKOTTAI DISTRICT

Dr. S.THILAGAVATHI M.E., Ph.D.,

PRINCIPAL



# **SRI BHARATHI**



ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

Kaikkurichi, Pudukkottai, Tamil Nadu - 622 303, India

# CERTIFICATE OF COMPLETION

This is to certify that Ms.K.Kalpana of III CSE has completed 5 days value added course about "Internet of things with PYTHON" from 03.08.2022 to 10.08.2022 during the academic year 2022-2023.

CEO Meck Teck **PRINCIPAL** 

SBECW

Dr. S.THILAGAVATHI M.E., Ph.D.,



# **SRI BHARATHI**



ENGINEERING COLLEGE FOR WOMEN

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Kaikkurichi, Pudukkottai, Tamil Nadu - 622 303, India

# CERTIFICATE OF COMPLETION

This is to certify that Ms.R.SNEHA of IV CSE has completed 5 days value added course about "Internet of things with PYTHON" from 03.08.2022 to 10.08.2022 during the academic year 2022-2023.

HIPMIT

**CEO** Meck Teck PRINCIPAL

Dr. S.THILAGAVATHI N.E., Ph. D. BECV

PRINCIPAL

Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India (Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING ACADEMIC YEAR 2022-2023 / ODD SEMESTER

Name of the Student:	Year/Sem:
AU Register Number:	
Value Added Course on "Intern	et of Things With Python"
MCQ QUESTIONS (	25X1 = 25  Marks)
1. Which of the following is false about IoT devices	unput b) They are used by sensors to hat?
a) IoT devices use the internet for collecting and sharing data	c) IoT devices use wireless technology
b) IoT devices need microcontrollers	d) IoT devices are completely safe
2. Which of the following is not an IoT platform?	
a) Amazon Web Services	c) Salesforce
b) Microsoft Azure	d) Flipkart
c) They have their own operating system	a) They are open-source software
3. Which of the following is not an application of Io	b) They can only read seales in ?To
a) BMP280	c) Smart city
b) Smart home	d) Self-driven cars
4. Which of the following is not a fundamental comp	onent of an IoT system?
a) Sensors	c) User interface
b) Connectivity and data processing	d) Transformer
c) Internet of Things Address	a) interact of Things Area
5. Which layer is used for wireless connection in IoT	
a) Application layer	c) Data link layer
b) Network layer	d) Transport layer
C XXIII CII CII CII CII CII CII CII CII	MANUS AM OCCURRENCE
6. Which of the following is false about the IoT com	
	c) A push button is a digital sensor
sensor	d) A browhound is a digital same
b) A microphone is a digital sensor	d) A keyboard is a digital sensor
7. Which of the following is used to capture data from	
a) Sensors	c) Microprocessors
b) Actuators	d) Microcontrollers
QOELORUSTA (D	SHW (d
8. Which of the following command is used to trig	
a) Hello	c) Alexa

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d) Hey

b) Suri

9. Which of the following is false about the MAN	NET IoT network?
<ul><li>a) It is a self-configuring network</li><li>b) It has a low data rate</li></ul>	c) It doesn't have any encryption d) Power is readily available for complex
	security
10. Which of the following is not a sensor in IoT	? sanco ao anama ram
a) BMP280	c) Photoresistor
b) DHT11	d) LED
11. Which of the following is not an actuator in	Name of the Student:
a) Stepper motor	c) An LED
b) A fan	d) Arduino
12. What is the use of PWM signals in IoT deve	elopment boards?
a) They are used by sensors to have analog	c) They are used by actuators to have analog
input	input
b) They are used by sensors to have digital	d) They are used by actuators to have digital
input seelon week assivab Tol (o	input amalia adi sen sociosis Tol (a
13. Which of the following is used to reprogram	n a Bootloader in IoT devices?
a) VHDL programming	c) ICSP
b) IDE	d) MANET
14. Which of the following is true about Arduir	no IoT devices?
a) They are open-source software	c) They have their own operating systems
b) They can only read analog inputs	d) They don't have pre-programmed firmware
15. How many number of elements in the Open	IoT Architecture?
a) 3 elements	c) 8 elements
b) 7 elements	d) 6 elements
16. IoT-A stands for	
a) Internet of Things Area	c) Internet of Things Address
b) Industrial of things Architecture	d) Internet of Things Architecture
17. Which of the following is not a feature of the	ne Raspberry PI model B IoT device?
a) It has 256 MB SDRAM	c) It has its own operating system
b) It has a single USB connector	d) It has an Ethernet port
18. Which of the following processor is used in	the December DI 2 IoT device?
a) Broadcom BCM2711	c) Broadcom BCM2838
b) Broadcom BCM2837	d) Intel 8085
Secondary for my second world in To Townson	Which of the following is used to capt
19. Which library is used to access I2C in Ardu	ino IoT devices?
a) EEPROM	c) DHT11 zrotem3A (d
b) Wire	d) ArduinoJson
1331VSD 1 UH order maxama, and 15 come of hear	A Water of the following command is to

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20. Which of the a) Serial monit	ne following is not related to Ardu	uino IDE IoT software? c) Upload
b) Verify		d) Terminate
21. Which of the a) Belkin's We		home IoT devices that include smart switches?  c) Awair
b) Cinder		d) Canary
22. IoT gateway a) Protocol abs		c) Security with hardware
b) Data storage		d) Simple and fast installation
23. What IoT co	ollects?	
<ul><li>a) Device data</li><li>b) Machine ger</li></ul>	nerated data	c) Sensor data d) Human generated data
	e following protocol is used to lin	
a) HTTP b) UDP		c) Network d) TCP/IP
25. Which serv	ice permits the changes to the IoT	Γ services?
<ul><li>a) Update</li><li>b) Registered se</li></ul>	ervice status	c) Enable from suspension d) Enable
		and.
		VAC Coordinator

Dr. S.THILAGAVATHI M.E., Ph. D.,
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# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING ACADEMIC YEAR 2022-2023 / ODD SEMESTER

Value Added Course on "Internet of Things With Python"

### **ANSWER KEY**

1	d	6	b	11	d	16	d	21	a
2	d	7	a	12	С	17	a	22	a
3	a	8	С	13	С	18	b	23	b
4	d	9	d	14	a	19	b	24	d
5	С	10	d	15	b	20	d	25	a

Dr. S.THILAGAVATHI M.E., Ph.D.,



(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING <u>ACADEMIC YEAR 2022-2023 / ODD SEMESTER</u>

	22-2023 / ODD SEMESTER
Name of the Student: R. Vaishnav	
AU Register Number: 91262010	04304
	ternet of Things With Python"
MCQ QUESTION	IS (25X1 = 25 Marks)
<ol> <li>Which of the following is false about IoT devalue</li> <li>IoT devices use the internet for collecting and sharing data</li> <li>IoT devices need microcontrollers</li> </ol>	c) IoT devices use wireless technology  d IoT devices are completely safe
<ul><li>2. Which of the following is not an IoT platform</li><li>a) Amazon Web Services</li><li>b) Microsoft Azure</li></ul>	
3. Which of the following is not an application of BMP280 b) Smart home	c) Smart city d) Self-driven cars
<ul> <li>4. Which of the following is not a fundamental co</li> <li>Sensors</li> <li>Connectivity and data processing</li> </ul>	mponent of an IoT system?  c) User interface d) Transformer
<ul><li>5. Which layer is used for wireless connection in I</li><li>a) Application layer</li><li>b) Network layer</li></ul>	oT devices? c) Data link layer d) Transport layer
<ul><li>6. Which of the following is false about the IoT co</li><li>a) A light sensor (photoresistor) is an analog sensor</li><li>b) A microphone is a digital sensor</li></ul>	omponents?  a push button is a digital sensor  d) A keyboard is a digital sensor
<ul> <li>7. Which of the following is used to capture data <ul> <li>a) Sensors</li> <li>b) Actuators</li> </ul> </li> <li>8. Which of the following command is used to tr <ul> <li>a) Hello</li> </ul> </li> </ul>	from the physical world in IoT devices? c) Microprocessors d) Microcontrollers igger the Amazon echo IOT device?
b) Suri	c) Alexa d) Hey PRINCIPAL SRIBHARATHI FINDING

9. Which of the following is false about the MAN	ET IoT network?
a) It is a self-configuring network b) It has a low data rate	d) Power is readily available for complex
	security
10. Which of the following is not a sensor in IoT?	
a) BMP280	c) Photoresistor
b) DHT11	(d) LED
11 Will Local Cill College	L-TO
11. Which of the following is not an actuator in	
a) Stepper motor	c) An LED
b) A fan	dArduino
12. What is the use of PWM signals in IoT deve	lopment boards?
a) They are used by sensors to have analog	(c) They are used by actuators to have analog
input	input
b) They are used by sensors to have digital	d) They are used by actuators to have digital
input and a solution of the so	input
12 Which of the following is used to represent	a Postlander in IoT devices?
13. Which of the following is used to reprogram	
a) VHDL programming	(c) ICSP d) MANET
b) IDE	d) WANE I
14. Which of the following is true about Arduin	o IoT devices?
(a) They are open-source software	c) They have their own operating systems
b) They can only read analog inputs	d) They don't have pre-programmed firmware
15 How many number of elements in the Open	IoT Architecture?
15. How many number of elements in the Open	c) 8 elements
a) 3 elements (b) 7 elements	d) 6 elements
(b) Clements	and the second s
16. IoT-A stands for	
a) Internet of Things Area	c) Internet of Things Address
b) Industrial of things Architecture	(d) Internet of Things Architecture
17. Which of the following is not a feature of th	e Rasnherry PI model B IoT device?
(a) It has 256 MB SDRAM	c) It has its own operating system
	d) It has an Ethernet port
by it has a single OBB connector	the management of a morney that A.15
18. Which of the following processor is used in	the Raspberry PI 3 IoT device?
a) Broadcom BCM2711	c) Broadcom BCM2838
(b) Broadcom BCM2837	d) Intel 8085
19. Which library is used to access I2C in Ardu	ino IoT devices?
English Control of the Control of th	e) DHT11
EEPROM (b) Wire	d) ArduinoJson
whe whe	A passage acceptable of the daid W. W.
	Glistiko /,
Dr. S.THILAGAVATHI	M.E. Ph.D.
Dr. S. IHILAGAN	NAME OF THE OWNER O
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Kaikkurchi - 622 303, Put	•

200 4711: 1 0 1 0 1	
20. Which of the following is not related to A	arduino IDE IoT software?
a) Schai monitor	c) Upload
b) Verify	d) Terminate
21. Which of the following is a complete line	of home IoT devices that include smart switches?
(a) Belkin's WeMo	o) Assistance in the include smart switches?
b) Cinder	c) Awair
	d) Canary
22. IoT gateway must provide	
a) Protocol abstraction	
b) Data storage	c) Security with hardware
of Butte storage	d) Simple and fast installation
23. What IoT collects?	
a) Device data	
	c) Sensor data
(b) Machine generated data	d) Human generated data
24. Which of the following protocol:	
men of the following protocol is used to l	ink all the devices in the IoT?
4) 111 11	c) Network
b) UDP	d) TCP/IP
25. Which service permits the charges to the	
service permits the changes to the lo	oT services?
(a) Opdate	c) Enable from suspension
b) Registered service status	d) Enable
	a) 2
	0. 7
	VILEY
	VAC Coordinator
Dr. S.THILAGAVA	THAM F Ph.D.,
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**ACADEMIC YEAR 2022-2023 (ODD SEM)** 

#### MARK SHEET FOR VALUE ADDED COURSE- INTERNET OF THINGS WITH PYTHON

0.0000000000000000000000000000000000000		C),85 Y G(11) II F S	443 3444 23	ATTENDANCE DETAILS		VAC-MCQ TEST		OVERALL
S.NO	REG.NO	NAME OF THE STUDENT	YEAR/ BRANCH	No of Sessions	Attendance Mark(100)	No of Correct	MCQ Mark(100)	MARK(100) (50% of A +
14		SIVAHARINIS	HIVOSE	Attended	(A)	Answers	(B)	50% of B)
1	912620104001	AKALYA S	III/CSE	12	100	22	88	94
2	912620104002	HEMA V	III/CSE	12	100	23	92	96
3	912620104003	ISWARYA R	III/CSE	12	100	24	96	98
4	912620104004	KALAIVANI S	III/CSE	12	100	20	80	90
5	912620104005	KALPANA K	III/CSE	12	100	18	72	86
6	912620104007	MEIYYAMMAL M	III/CSE	12	100	19	76	88
7	912620104008	NANDHINI-P	III/CSE	12	100	21	84	92

8	912620104009	PRASANNA DEVI P	III/CSE	12	100	20	80	90
9	912620104010	PRISHIYA E	III/CSE	12	100	21	84	92
10	912620104012	ROSAMMAL M	III/CSE	12	100	21	84	92
11	912620104013	ROSHIKA K	III/CSE	12	100	22	88	94
12	912620104014	SABHA AYSHA S	III/CSE	12	100	23	92	96
13	912620104015	SATHIYASRI P	III/CSE	12	100	22	88	94
14	912620104016	SIVAGAMI D	III/CSE	12	100	23	92	96
15	912620104017	SIVAHARINI S	III/CSE	12	100	21	84	92
16	912620104018	SUBASHINI C	III/CSE	12	100	22	88	94
17	912620104019	SUBASHINI M	III/ÇSE	12	100	23	92	96
18	912620104020	SWETHA D	III/CSE	12	100	23	92	96
19	912620104021	VANATHI T	III/CSE	12	100	22	88	100
20	912620104022	VINCIYA MARY S	III/CSE	12	100	21	84	92
21	912620104304	VAISHNAVI R	III/CSE	12 AGAVATHI M	100	23	92	96
		The	Dr. 5.1 HIL	PRINCIPAL	TELLIO,			

22	912619104001	ANNAPOORANI M	IV /CSE	ELOS 12 MEN	100	20	80	90
23	912619104003	ARUNNAVAMEENA A	IV/CSE	12	100	18	72	86
24	912619104004	DAYANA P	IV/CSE	12	100	21	84	303 92
25	912619104005	DHARSHINI D	IV/CSE	12	100	23 0	92	96
26	912619104007	FAHMIDHA B	IV/CSE	12	100	19	76	88
27	912619104009	GULNAS FATHIMA S	IV/CSE	12	100	19	76	88
28	912619104010	HELAN J	IV/CSE	12	100	24	96	98
29	912619104011	KEERTHANA R	IV/CSE	12	100	21	84	92
30	912619104012	MUTHULAKSHMI G	IV/CSE	12	100	22	88	94
31	912619104013	MUTHU MEENAKSHI M	IV/CSE	12	100	23	92	96
32	912619104014	NIROSHIKA R	IV/CSE	12	100	21	84	92
33	912619104017	PARAMESHWARI S	IV/CSE	12	100	21	84	92
34	912619104019	RANJANI K	IV/CSE	12 .	100	20	80	90
35	912619104020	RILWANA PARVEEN J	IV/CSE	12	100	23	92	96
			or S.THILAG	AVATHI M.E.,F	Ph.D.,			

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		I REPAYDA EVRAPEM )	Y IMPOR I	177	THO I		A"	. AG
36	912619104021	ROOPINA R	IV/CSE	12	100	22	88	94
37	912619104022	SANDHIYA B	IV/CSE	12	100	21	84	92
38	912619104023	SANTHI D	IV/CSE	12	100	19	76	88
39	912619104024	SARANYA C	IV/CSE	12	100	18	72	86
40	912619104027	SNEHA R	IV/CSE	12	100	19	. 76	88
41	912619104029	SURIYA JOTHI S	IV/CSE	12	100	23	92	96
42	912619104301	ABINAYA S	IV/CSE	12	100	21	84	92
	<u> </u>	LEGATION TO A	inida	10	100	97.	di.	

VAC Coordinator

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#### ACADEMIC YEAR 2022-2023 / ODD SEMESTER

#### DEPARTMENT CIRCULAR

Date: 16 / 08 / 2022

A Value added course on "Internet of Things with Python" will be conducted by GALWIN Technology, Trichy in the college campus for CSE&EEE-II year from 22.08.2022 to 26.08.2022. Certificates will be issued to all eligible participants at the end of the Course.

S.No.	Name of the Course	Resource Person
1.	Internet of Things With Python	Resource Person: Mr.Kamalakannan Trainer GALWIN Technology

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Cc:

- · Principal's Office
- IQAC Coordinator
- Class In charges II year of CSE, EEE
- II -year CSE, EEE Students
- Notice Board

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

<u>ACADEMIC YEAR 2022-2023 / ODD SEMESTER</u>

# Value Added Course on "INTERNET OF THINGS WITH PYTHON" SYLLABUS

S.NO	TOPIC COVERED	DURATION (in hours)	DATE FN/AN
1	Understanding IoT fundamentals - IOT Architecture and protocols	3	22.08.2022
2	Various Platforms for IoT - Real time Examples of IoT	3	22.08.2022
3	Arduino Uno Architecture - Setup the IDE, Writing Arduino Software - Arduino Libraries	3	23.08.2022
4	Overview of IoT components and IoT Communication Technologies - Challenges in IOT	3	23.08.2022
5	Basics of Embedded C programming for Arduino	3	24.08.2022
6	Interfacing LED, push button and buzzer with Arduino	3	24.08.2022
7	Interfacing Arduino with LCD	3	25.08.2022
8	Overview of Sensors working - Analog and Digital Sensors	3	25.08.2022
9	Interfacing of Temperature, Humidity, Motion, Light and Gas Sensor with Arduino	3	26.08.2022
10	Interfacing of Actuators with Arduino	3	26.08.2022
	Total Periods:	30	

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#### DEPARTMENT OF COMPUTER SCENCE AND ENGINEERING

# ACADEMIC YEAR 2022-2023 (ODD SEM) STUDENTS PARTICIPATION LIST-VAC PROGRAM

## INTERNET OF THINGS WITH PYTHON

S.NO	REG.NO	NAME OF THE STUDENT	YEAR/BRANCH
	RICSE	VISHNUPRIYA A	90 91262
1.	912621104001	ABINAYA K	II /CSE
2.	912621104002	AMEERA N	II /CSE
3.	912621104003	ANJUGAM C	II/CSE
4.	912621104004	ARUNDATHI S	II /CSE
5.	912621104005	ASHIKA B	II /CSE
6.	912621104006	DIVYA T	II /CSE
7.	912621104007	ELACKIYA G	II /CSE
8.	912621104008	GAYATHRI K	II /CSE
9.	912621104009	GEETHA M	II /CSE
10.	912621104010	HARSHITHA P	II /CSE
11.	912621104011	ISHWARYA S	II /CSE
12.	912621104012	JANANI R	II /CSE
13.	912621104015	LAVANYA S	II /CSE
14.	912621104016	MAHASREE P	II /CSE
15.	912621104018	PRIYA M	II /CSE
16.	912621104019	RABIKA R	II /CSE
17.	912621104021	SAHEENA BEGAM A	II /CSE
18.	912621104022	SASIPRIYA R	II /CSE

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19.	912621104023	SHAMIMA P	II /CSE		
20.	912621104024	SHEERA BANU A	II /CSE		
21.	912621104025	SIVAJOTHIKA S	II /CSE		
22.	912621104026	SIVAPRIYA R	II /CSE		
23.	912621104027	SUBHA DHARSHINI S	II /CSE		
24.	912621104028	SUBIKSHA S	II /CSE		
25.	912621104029	VINITHA K	II /CSE		
26.	912621104030	VISALATCHI S	II /CSE		
27.	912621104301	VISHNAVI B	II /CSE		
28.	912621104302	VISHNUPRIYA A	II /CSE		
29.	912621104701	AARTHI S	II /CSE		
30.	912621104702	SWATHI A.R	II /CSE		

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# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING ACADEMIC YEAR ODD SEMESTER (2022-2023)

# STUDENT NAME LIST FOR VALUE ADDED COURSE INTERNET OF THINGS WITH PYTHON

S.NO	NAME	REG.NO	YEAR & SEMESTER		
1.	GOKULAPRAVEENA A	912621105001	II & III		
2.	SUMITHRA S	912621105004	II & III		

VAC COORDINATOR

HoD/EEE

HOD EEE

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

KAIKKURICHI,

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Dr. S.THILAGAVATHI M.E.,Ph.D.,



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Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India
DEPARTMENT OF COMPUTER SCENECE AND ENGINEERING

ACADEMIC YEAR 2022-2023 (ODD SEM)

## ATTENDANCE SHEET FOR VALUE ADDED COURSE- INTERNET OF THINGS WITH PYTHON

S.NO	REG.NO	NAME OF THE STUDENT	YEAR/		DATE: 22.08.22		DATE: 23.08.22		DATE: 24.08.22		DATE: 25.08.22		TE: 08.22	NO OF .	SIGNATURE OF THE
22			BRANCH	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	ATTENDED	STUDENT
1.	912621104001	ABINAYA K	II /CSE	1	1	1	1	1	/	1	/	1	1	10	A Abiragi
2.	912621104002	AMEERA N	II /CSE	1	1	1	1	1	1	1	1	1	1	10	Ame
3.	912621104003	ANJUGAM C	II /CSE	1	1	1	1	1	/	1	/	/	/	10	Aul.
4.	912621104004	ARUNDATHI S	II /CSE	1	1	1	/	1	1	1	1	/	1	10	Serif.
5.	912621104005	ASHIKA B	II /CSE	1	1	a	a	1	1	1	1	1	/	08	Laushiaa.
6.	912621104006	DIVYA T	II /CSE	1	1	1	1	1	1	1	1	a	a	08	T. Dig
7.	912621104007	ELACKIYA G	II /CSE	1	1	1	1	1	1	1	1	1	1	w	G.E.P.
8.	912621104008	GAYATHRI K	II /CSE	1	1	1	1	1	1	1	1	1	1	10	60 galle
9.	912621104009	<b>GEETHA M</b>	II /CSE	1	1	1	1	/	1	1	1	/	1	10 2	M. ben.
10.	912621104010	HARSHITHA P	II /CSE	1	1	1	1	1	1	1	1	1	1	10	Falthe.
11.	912621104011	ISHWARYA S Dr S.T	HILAGAEVATI	HM.E	.,Æh.□	.,/	1	1	1	1	1	1	/	10 (	Burn

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12.	912621104012	JANANI R	II /CSE	1	1	1	/	1	1	1	1	1	1	10	P. Jane
13.	912621104015	LAVANYA S	II /CSE	a	a	1	1	1	1	1	1	1	1	08	S. Janovija.
14.	912621104016	MAHASREE P	II /CSE	1	1	1	1	1	./	1	1	1	1	10	P. 19-19.
15.	912621104018	PRIYA M	II /CSE	1	1	1	1	/	1	1	1	1	/	10	M. Priga
16.	912621104019	RABIKA R	II /CSE	1	1	1	1	1	1	1	1	1	1	10	D. Rall
17.	912621104021	SAHEENA BEGAM A	II /CSE	1	1	1	1	1	1	1	/			0 10	ScheinsbeganA
18.	912621104022	SASIPRIYA R	II /CSE	1	1	1	1	1	1	1	1	1	1	ED	P. Shanimaj
19.	912621104023	SHAMIMA P	II /CSE	1	1	a	a	1	1	1	1	1	1	08	RSSi
20.	912621104024	SHEERA BANU A	II /CSE	1	1	1	1	1	1	1	1	1	1	10	tilmaly'.
21.	912621104025	SIVAJOTHIKA S	II /CSE	1	1	1	1	1	1	1	1	1	1	10	Prajothikas
22.	912621104026	SIVAPRIYA R	II /CSE	1	1	1	1	1	1	1	1	1	1	10	R. Onapinga
23.	912621104027	SUBHA DHARSHINI S	II /CSE	1	1	1	1	1	1	a	a	1	1	08	OS all
24.	912621104028	SUBIKSHA S	II /CSE	1	1	1	1	1	1	1	1	DV	LE:	LO	S. Sertala
25.	912621104029	VINITHA K	II /CSE	1	1	1	1	1	1	1	1	1	1	10	K-neniha
26.	912621104030	VISALATCHI S	II /CSE	1	1	1	1	1	1	1	1	1	1	LO	8-g°
27.	912621104301	VISHNAVI B	II /CSE	1	1	1	1	1	1	1	1	1	1	10	Caishna Di
28.	912621104302	VISHNUPRIYA A	II /CSE	1	1	1	1	1	1	1	1	1	1	10	A. Vishnipiya
29.	912621104701	AARTHI S	II /CSE	1	1	1	1	1	1	1	1	1	1	10	Sidali
			OLS.THILD	MAN	ATHI	MER	oh D								

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30. 912621104702 SWATHI A.R II /CSE / / / / / / / / / /	10 Eustline
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(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) KAIKKURICHI, PUDUKKOTTAI-622 303 DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING **ACADEMIC YEAR ODD SEMESTER (2022-2023)** ATTENDANCE SHEET FOR VALUE ADDED COURSE **INTERNET OF THINGS WITH PYTHON** 

S.NO	REG. NO	NAME	YEAR/	22.08.22		23.08.22		24.08.22		25.08.22		26.08.22		NO. OF CLASS	SIGN OF
	SEM F.N A.N F.N	A.N	F.N	A.N	F.N	A.N	F.N	A.N	ATTENDED	STUDENT					
1	912621105001	GOKULAPRAVEENA A	II&III	1	1	1	1	1	1	1	1	1	1	10	A. Gokul.
2	912621105004	SUMITHRA S	II&III	1	1	1	/	1	1	/	/	'/	1	10	S. Sume.

VAC COORDINATOR

Dr. S.THILAGAVATHUM.E., Ph.D., PRINCIPAL

**SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN** Kaikkurchi - 622 303, Pudukkottai Dt.

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(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

			Report on	V	alue	Add	ed Cou	rse		
Title:	INTER		OF THINGS V	177						
Resource Person: T			M.Kamalakann iner lwin Technolog							
Date of co	nduct fro	m:	22.08.2022	22.08.2022		26.08	.2022	Duration	1: 30	Hours
Organized	l Departn	nent:	COMPUTERS	SCIE	ENCE A	AND E	NGINEERI	NG		
Participan	t Year:	ar: 2 Semester:			ODI	)	No. of Stu Registered		[CSE	32 -30 ,EEE-02]

Auditorium Venue:

#### Outcome of Value Added Course (VAC)

#### At the end of the VAC course the student can able to

- Explain fundamentals about IoT.
- Illustration of IoT Access technologies.
- Design methodology and different IoT hardware platforms.
- Identify with the application areas of IOT.
- Realize the revolution of Internet in Mobile Devices, Cloud & Sensor Networks.
- Describe the building blocks of Internet of Things and characteristics.

No. of students successfully completed the VAC course is 32 students based on the following assessment process.

#### **Assessment Process**

Students, who are securing more than 60% on total score and secured more than 75% in attendance is eligible to receive the certificate for the VAC course conducted. Total Score = (0.5 \*Attendance in VAC out of 100 percentage + 0.5 \*Test mark in VAC out of 100 marks)

VAC Coordinator

**Principal** 

SRI BHARATHI ENGINEERINBI. S.THILAGAVATHI M.E., Ph. D. PRINCIPAL

COLLEGE FOR WOMEN KAIKKURICHI,

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.

PUBUKKOTTAI - 622 303

Dr. S.THILAGAVATHI M.E., Ph.D.

PRINCIPAL



(Approved by AICTE | Affiliated to Anna University)

KAIKKURICHI, PUDUKKOTTAI-622303



# Certificate of completion

### VALUE ADDED PROGRAM

This is to Certify that Mr/Ms. AARTHI.S of II CSE has successfully completed Value Added Course on "Internet of Things with Python" organized by the Department of Computer Science And Engineering in association with Galwin Technology from 22.08.2022 to 26.08.2022 during the academic year 2022-2023 [5 Days].

D.19

Managing Director Galwin Technology HoD/CSE

SBECW

PRINCIPAL SBECW

Dr. S.THILAGAVATHI M.E., Ph.D.,



(Approved by AICTE | Affiliated to Anna University)

KAIKKURICHI, PUDUKKOTTAI-622303



# Certificate of completion

### VALUE ADDED PROGRAM

This is to Certify that Mr/Ms. AMEERA.M of II CSE has successfully completed Value Added Course on "Internet of Things with Python" organized by the Department of Computer Science And Engineering in association with Galwin Technology from 22.08.2022 to 26.08.2022 during the academic year 2022-2023 [5 Days].

Managing Director
Galwin Technology

D.14

HoD/CSE SBECW PRINCIPAL SBECW

Dr. S.THILAGAVATHI M.E., Ph.D.,



(Approved by AICTE | Affiliated to Anna University)

KAIKKURICHI, PUDUKKOTTAI-622303



# Certificate of completion

### **VALUE ADDED PROGRAM**

This is to certify that Ms. GOKULAPRAVEENA A of II EEE has successfully completed Value Added Course on "INTERNET OF THINGS WITH PYTHON" organized by the Department of Computer Science and Engineering in association with Galwin Technology from 22.08.2022 to 26.08.2022 during the academic year 2022-2023 [5 Days].

Managing Director Galwin Technology

D.14

HoD/CSI SBECW PRINCIPAL SBECW

Dr. S.THILAGAVATHI M.E., Ph.D.,

PRINCIPAL

# HUME ERING COLLEGE SANDON

# SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India (Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING <u>ACADEMIC YEAR 2022-2023 / ODD SEMESTER</u>

Name of the Student:	Year/Sem:
AU Register Number:	
Value Added Course on "Inte	rnet of Things With Python"
MCQ QUESTIONS	(25X1 = 25 Marks)
1. Which of the following is false about IoT device	ees?
<ul> <li>a) IoT devices use the internet for collecting and sharing data</li> </ul>	c) IoT devices use wireless technology
b) IoT devices need microcontrollers	d) IoT devices are completely safe
2. Which of the following is not an IoT platform?	
a) Amazon Web Services	c) Salesforce
b) Microsoft Azure	d) Flipkart
c) They have their own operating system	a) They are open-source software
3. Which of the following is not an application of	IoT? Wasan basa alao ma wadii (d
a) BMP280	c) Smart city
b) Smart home	d) Self-driven cars
A Willia Cal Cal : transled (Cal	a) 3 elements
4. Which of the following is not a fundamental com	
a) Sensors	c) User interface
b) Connectivity and data processing	d) Transformer
5. Which layer is used for wireless connection in Io	T devices?
a) Application layer	c) Data link layer
b) Network layer	d) Transport layer
c) It has its own operating system	(a) It has 256 A (3) SERSAN
6. Which of the following is false about the IoT con	mponents?
a) A light sensor (photoresistor) is an analog	c) A push button is a digital sensor
sensor	18. Which of the following processor i
b) A microphone is a digital sensor	d) A keyboard is a digital sensor
7. Which of the following is used to capture data f	rom the physical world in LoT devices?
a) Sensors	c) Microprocessors
b) Actuators	d) Microcontrollers
d) Arduinolson	d) Wherecontrollers
8. Which of the following command is used to trig	gger the Amazon echo IOT device?
a) Hello	c) Alexa
b) Suri	d) Hey

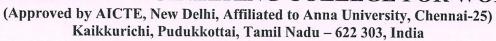
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COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.

9. Which of the following is false about the MAN	ET IoT network?
<ul><li>a) It is a self-configuring network</li><li>b) It has a low data rate</li></ul>	<ul><li>c) It doesn't have any encryption</li><li>d) Power is readily available for complex security</li></ul>
10 Which of the following is not a senser in LaT2	
<ul><li>10. Which of the following is not a sensor in IoT?</li><li>a) BMP280</li></ul>	
b) DHT11	c) Photoresistor d) LED
11. Which of the following is not an actuator in	Name of the Student: 'Tol
a) Stepper motor	c) An LED
b) A fan	d) Arduino
12. What is the use of PWM signals in IoT deve	lopment boards?
a) They are used by sensors to have analog	c) They are used by actuators to have analog
input b) They are used by sensors to have digital	input d) They are used by actuators to have digital
input	input input
13. Which of the following is used to reprogram	a Bootloader in IoT devices?
a) VHDL programming	c) ICSP
b) IDE	d) MANET
14. Which of the following is true about Arduing	o IoT devices?
a) They are open-source software	c) They have their own operating systems
b) They can only read analog inputs	d) They don't have pre-programmed firmware
15. How many number of elements in the Open	IoT Architecture?
a) 3 elements	c) 8 elements
b) 7 elements	d) 6 elements
16. IoT-A stands for	
a) Internet of Things Area	c) Internet of Things Address
b) Industrial of things Architecture	d) Internet of Things Architecture
17. Which of the following is not a feature of the	e Raspberry PI model B IoT device?
a) It has 256 MB SDRAM	c) It has its own operating system
b) It has a single USB connector	d) It has an Ethernet port
18. Which of the following processor is used in t	the Raspberry PI 3 IoT device?
a) Broadcom BCM2711	c) Broadcom BCM2838
b) Broadcom BCM2837	d) Intel 8085
19. Which library is used to access I2C in Ardui	no IoT devices?
a) EEPROM	c) DHT11 (d
b) Wire	d) ArduinoJson

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<ul><li>20. Which of the following is not related to Arda</li><li>a) Serial monitor</li><li>b) Verify</li></ul>	uino IDE IoT software? c) Upload d) Terminate
<ul><li>21. Which of the following is a complete line of a) Belkin's WeMo</li><li>b) Cinder</li></ul>	home IoT devices that include smart switches? c) Awair d) Canary
<ul><li>22. IoT gateway must provide</li><li>a) Protocol abstraction</li><li>b) Data storage</li></ul>	c) Security with hardware d) Simple and fast installation
<ul><li>23. What IoT collects?</li><li>a) Device data</li><li>b) Machine generated data</li></ul>	c) Sensor data d) Human generated data
<ul><li>24. Which of the following protocol is used to line</li><li>a) HTTP</li><li>b) UDP</li></ul>	k all the devices in the IoT? c) Network d) TCP/IP
<ul><li>25. Which service permits the changes to the IoT</li><li>a) Update</li><li>b) Registered service status</li></ul>	services? c) Enable from suspension d) Enable
Dr. S.THILAGAVATHI PRINCIPAL SRI BHARATHI ENGIN COLLEGE FOR WO Kaikkurchi - 622 303, Puduk	EERING





## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING **ACADEMIC YEAR 2022-2023 / ODD SEMESTER**

Value Added Course on "Internet of Things With Python"

#### **ANSWER KEY**

1	d	6	ь	11	d	16	d	21	a
2	d	7	a	12	С	17	a	22	a
3	a	8	С	13	С	18	b	23	ь
4	d	9	d	14	a	19	b	24	d
5	С	10	d	15	b	20	d	25	a

VAC Coordinator

Dr. S.THILAGAVATHI M.E., Ph.D.

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Kaikkurchi - 622 303, Pudukkottai Dt.



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# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING <u>ACADEMIC YEAR 2022-2023 / ODD SEMESTER</u>

ACADEMIC YEAR 2022-	-2023 / ODD SEMESTER
Name of the Student: G. Elastwiga	Year/Sem: 1 / 0 3
AU Register Number: 91262110400	(a) Stepper motor
Value Added Course on "Inter	net of Things With Python"
MCQ QUESTIONS	(25X1 = 25 Marks)
<ol> <li>Which of the following is false about IoT device</li> <li>a) IoT devices use the internet for collecting and sharing data</li> <li>b) IoT devices need microcontrollers</li> </ol>	es? c) IoT devices use wireless technology loT devices are completely safe
<ul><li>2. Which of the following is not an IoT platform?</li><li>a) Amazon Web Services</li><li>b) Microsoft Azure</li></ul>	c) Salesforce      Flipkart
<ul><li>3. Which of the following is not an application of</li><li>a) BMP280</li><li>b) Smart home</li></ul>	IoT? c) Smart city d) Self-driven cars
<ul><li>4. Which of the following is not a fundamental compa) Sensors</li><li>b) Connectivity and data processing</li></ul>	ponent of an IoT system? c) User interface d) Transformer
<ul><li>5. Which layer is used for wireless connection in Io</li><li>a) Application layer</li><li>b) Network layer</li></ul>	Γ devices?  C) Data link layer d) Transport layer
6. Which of the following is false about the IoT con	nponents?
a) A light sensor (photoresistor) is an analog sensor	c) A push button is a digital sensor
b A microphone is a digital sensor	d) A keyboard is a digital sensor
7. Which of the following is used to capture data from Sensors b) Actuators	com the physical world in IoT devices? c) Microprocessors d) Microcontrollers
8. Which of the following command is used to trig a) Hello b) Suri  Dr. S.THILAGAVATI	Alexa d) Hey
PRINCIPA	L A PO INC

9. Which of the following is false about the MA	NET IoT network?
a) It is a self-configuring network	c) It doesn't have any encryption
b) It has a low data rate	d) Power is readily available for complex
minal 1800 - mball ilma I dan	security
10. Which of the following is not a sensor in Io	r? 1914003 to a sumthatag
a) BMP280	c) Photoresistor
b) DHT11	(d) LED
Year/Sem: Wear/Sem: W/o 2	Same of the Student: (p Soak
11. Which of the following is not an actuator i	
a) Stepper motor	c) An LED
b) A fan	(d) Arduino
10 Miles de COMAC : 1 ' L'T le	BO Select A DOMAN, MAIS
12. What is the use of PWM signals in IoT de	Control of the Contro
a) They are used by sensors to have analog	They are used by actuators to have analog input
input b) They are used by sensors to have digital	d) They are used by actuators to have digital
input	input
input	and sharing data
13. Which of the following is used to reprogra	am a Bootloader in IoT devices?
a) VHDL programming	C) ICSP
b) IDE	d) MANET
c) Salestocce	
14. Which of the following is true about Ardu	
a) They are open-source software	c) They have their own operating systems
b) They can only read analog inputs	d) They don't have pre-programmed firmware
15 Herry many mumber of alamanta in the One	on IoT Architecture?
15. How many number of elements in the Ope	
a) 3 elements (b) 7 elements	c) 8 elements d) 6 elements
(10) Helements	d) o cicinonis
16. IoT-A stands for	
a) Internet of Things Area	c) Internet of Things Address
b) Industrial of things Architecture	DInternet of Things Architecture
read dail melling	a) Application layer
17. Which of the following is not a feature of	the Raspberry PI model B IoT device?
a) It has 256 MB SDRAM	c) It has its own operating system
b) It has a single USB connector	d) It has an Ethernet port
Associated by a condition deep Au(5 200	e a) A light sensor (photograsser) is an apal
18. Which of the following processor is used	
(a) Broadcom BCM2711	c) Broadcom BCM2838
6) Broadcom BCM2837	d) Intel 8085
19. Which library is used to access I2C in Arc	duino IoT devices?
	c) DHT11
a) EEPROM b) Wire	d) ArduinoJson
O) WILC	Leave the control of
Tables House Company	

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20. a) b)	Which of the following is not related to Ard Serial monitor Verify	uino IDE IoT software?  c) Upload  d) Terminate
1 1/	Which of the following is a complete line of Belkin's WeMo Cinder	home IoT devices that include smart switches?  c) Awair d) Canary
-	IoT gateway must provide Protocol abstraction Data storage	c) Security with hardware d) Simple and fast installation
	What IoT collects? Device data Machine generated data	c) Sensor data d) Human generated data
5.	Which of the following protocol is used to lin HTTP UDP	c) Network d TCP/IP
1	Which service permits the changes to the Io Update Registered service status	Services?  (c) Enable from suspension  d) Enable

VAC Coordinator

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## DEPARTMENT OF COMPUTER SCEIENCE AND ENGINEERING

**ACADEMIC YEAR 2022-2023 (ODD SEM)** 

## MARK SHEET FOR VALUE ADDED COURSE- INTERNET OF THINGS WITH PYTHON

18	912621104019	RABIKA R	TI /CSE	ATTENDANCE DETAILS		VAC-MO	OVERALL	
S.NO	REG.NO	NAME OF THE STUDENT	YEAR/ BRANCH	No of Sessions Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	MARK(100) (50% of A + 50% of B)
13	912621104001	ABINAYA K	II /CSE	10	100	22	88	94
2	912621104002	AMEERA N	II /CSE	10	100	23	92	96
3	912621104003	ANJUGAM C	II /CSE	10	100	21	84	92
4	912621104004	ARUNDATHI S	II /CSE	10	100	19	76	88
5	912621104005	ASHIKA B	II /CSE	8	80	20	80	80
6	912621104006	DIVYA T	II /CSE	8	80	21	84	82
7	912621104007	ELACKIYA G	II /CSE	10	100	24	96	98

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# PRINCIPAL PRINCIPAL SRIBHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 822 303, Pudukkottai Dt.

		1						
8	912621104008	GAYATHRI K	II /CSE	10	100	21	84	92
9	912621104009	<b>СЕЕТНА М</b>	II /CSE	10	100	22	88	94
10	912621104010	HARSHITHA P	II /CSE	10	100	21	84	92
11	912621104011	ISHWARYA S	II /CSE	10	100	23	92	96
12	912621104012	JANANI R	II /CSE	10	100	24	96	98
13	912621104015	LAVANYA S	II /CSE	8	80	21	84	82
14	912621104016	MAHASREE P	II /CSE	10	100	22	88	94
15	912621104018	PRIYA M	II /CSE	10	100	24	96	98
16	912621104019	RABIKA R	II /CSE	10	100	19	76	88
17	912621104021	SAHEENA BEGAM A	II /CSE	10	100	24	96	98
18	912621104022	SASIPRIYA R	II /CSE	10	100	19	76	88
19	912621104023	SHAMIMA P	II /CSE	8	80	23	92	86
20	912621104024	SHEERA BANU A	II /CSE	10	100	23	92	96
21	912621104025	SIVAJOTHIKA S	II /CSE	10	100	20	80	90
		Dr. S. THIL	AGAVATHIM.	E.,Ph.D.,				

22	912621104026	SIVAPRIYA R	II /CSE	10	100	22	88	94
23	912621104027	SUBHA DHARSHINI S	II /CSE	8	80	23	92	86
24	912621104028	SUBIKSHA S	II /CSE	10	100	21	84	92
25	912621104029	VINITHA K	II /CSE	10	100	19	76	88
26	912621104030	VISALATCHI S	II /CSE	10	100	18	72	86
27	912621104301	VISHNAVI B	II /CSE	10	100	19	76	88
28	912621104302	VISHNUPRIYA A	II /CSE	10	100	21	84	92
29	912621104701	AARTHI S	II /CSE	10	100	18	72	86
30	912621104702	SWATHI A.R	II /CSE	10	100	19	76	88

Coordinator

Dr. S.THILAGAVATHI M.E.,PH.D., PRINCIPAL

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.

HOD / CSE SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI, PUDUKKOTTAI - 622 303

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#### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

# ACADEMIC YEAR ODD SEMESTER (2022-2023) MARK SHEET FOR VALUE ADDED COURSE INTERNET OF THINGS WITH PYTHON

S.NO	NAME	REG NO.	YEAR/ SEM	ATTENDACE 50% VAC -MCQ 50%(B)		_	OVERALL MARK	
				No of Session Attended	MARKS	No of Correct Answer	MARKS	(A+B)
1	GOKULAPRAVEENA A	912621105001	II&IV	10	100	22	88	94
2	SUMITHRA S	912621105004	II&IV	10	100	23	-92	96

VAC COORDINATOR

HoD/EEE

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI,

PUDUKKOTTAI - 622 303,

Dr. S.THILAGAVATHI M.E.S.Ph.D.,