T.J.S ENGINEERING COLLEGE

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Accredited by NAAC / ISO 9001:2015 Certified Institution.
TJS Nagar, Peruvoyal, Near Kavaraipettai,
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601206**

VALUE ADDED PROGRAM

CS0703- VIRTUALIZATION

T.J.S ENGINEERING COLLEGE

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TJS Nagar, Peruvoyal, Near Kavaraipettai, Gummidipoondi Taluk, Thiruvallur District -601206

14.10.2021

PERMISSION LETTER

From

Mr. Dhakshina Moorthy

Head of Department

Computer Science and Engineering,

TJS Engineering College,

Peruvoyal,

Thiruvallur district.

To

The Principal

TJS Engineering College,

Peruvoyal,

Thiruvallur district.

Respected Sir,

Sub: Permission to offer value added course – Requested –Reg

I wish to inform you that, we have planned to conduct value added course on CS0703 "Virtualization" for IV year students of B.E Computer science and Engineering students of strength 52 from 26.10.2021 to 30.10.2021.In this regard, permission may kindly be granted to offer the following value added course.

Thanking You

Yours Sincerely,

A.V.B.Dhakhina moorthy/HOD

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Gummidipoondi Taluk,
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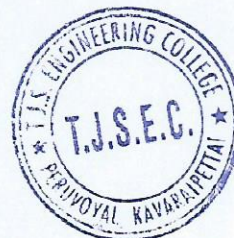
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Ref: TJSEC/CSE/CIR/21-22/VAC001

Date:15.10.2021

CIRCULAR

It is hereby informed the Department of Computer Science and Engineering is planning to conduct a value added course for IV year students of strength 52 on the topic of CS0703- "Virtualization" on 26.10.2021 to 30.10.2021 at Placement Seminar Hall. Hence all the Heads of the departments, faculty members and students of IV year CSE are requested to attend the Program.

Principal

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2. All HoDs (to circulate among their staff members & students)
3. Library
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE on CS0703-"VIRTUALIZATION"

Brochure

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DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING

Organizing
Five days Value Added Course on
Course Code : CS0703

VIRTUALIZATION

Resource Person

Mr.R.MURALI KRISHNAN, BE.,MBA.,
DIRECTOR- ZAFIN FINTECH PRODUCT COMPANY.

For IV th Year CSE Students
Date
26.10.2021
to
30.10.2021
Time
9.00 to 3.30 pm
Venue
TJSEC Seminar Hall

Ms. V. Pavithra, M.E.,
Assistant Professor / CSE
Staff Co ordinator

Mr. A.V.B. Dhakshina Moorthy
HOD / Department of CSE

Dr. J. Prakash, M.E., Ph.D.,
Principal

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T.J.S.E.C.
PERUVOYAL, KAVARAIPETTAI

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE on CS0703-"VIRTUALIZATION"

STUDENTS NAME LIST

IV year CSE

S. No.	Register No.	Student Name
1	112818104001	AASHIKA. K.
2	112818104002	ABAKA CHARAN SAI
3	112818104003	ABINAYA. D.
4	112818104004	ANDALAMALA SHABARISH
5	112818104005	ASHNI. A. R.
6	112818104006	BALAJI. A.
7	112818104007	BALAJI. B.
8	112818104008	BALAJI. S.
9	112818104009	BHARATHI RAJA. K.
10	112818104010	BHARGAVI. P.
11	112818104011	BHUVANESWARI. V.
12	112818104013	DINESH. D
13	112818104014	DINESH BABU. N.
14	112818104015	DIVYA. K.
15	112818104016	GOWRI SANKAR. K. B.
16	112818104017	GUDUR VARSHITH
17	112818104018	GURRAM LIKITHA
18	112818104019	JAYALAKSHMI S
19	112818104020	JEBASTI SANJANA. S.

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Gummidipoondi Taluk,
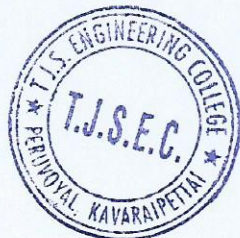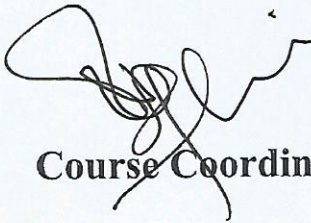Thiruvallur Dist - 601 206.

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20	112818104021	JEEVA. V.
21	112818104022	JEEVITHA. S.
22	112818104023	JOSHUA. J.
23	112818104024	JOTHIKA. A.
24	112818104025	KAARTHICK RAJ. T.
25	112818104026	KATDHIRI JAYASURYA
26	112818104027	KANI AMUDHAN. S.
27	112818104028	KARTHIKA. K. S.
28	112818104029	KEERTHANA. R.
29	112818104030	LAVANYA. K.
30	112818104031	LEELAVATHI. K.
31	112818104032	LOKESH G
32	112818104034	MARIMUTHU P
33	112818104035	MOSES STEPHEN ARULRAJ. S.
34	112818104036	MUGILA. K.
35	112818104037	MYLAM SOWMYA
36	112818104038	NARRA SREE DIVYA
37	112818104040	PAUL DHINAKARAN. J.
38	112818104041	POORNITHA. S.
39	112818104042	PRASANTH. R.
40	112818104043	PRATHEEBA. T.
41	112818104044	PRAVEEN KUMAR M
42	112818104045	PRINCYAVANTHIKA R
43	11281810104048	SHARMI V

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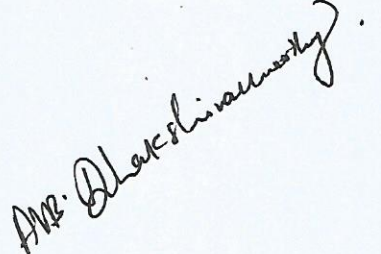
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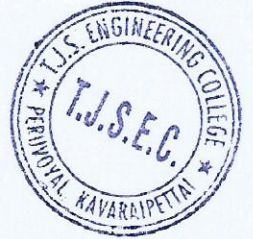TJS Nagar, Peruvoyal, Near Kavaraipettai, Gummidipoondi Taluk, Thiruvallur District -601206

44	112818104049	SIDDARTHAN. S.
45	112818104050	SRIKANTH V G
46	112818104051	SUBHASHINI A
47	112818104052	SUDHALAGUNTA LOKESH
48	112818104053	UYYALA MAHESWAR REDDY
49	112818104054	VAISHNAVI. S.
50	112818104301	HARISH KUMAR
51	112818104302	KOKILA
52	112818104901	AHAMED ASIK

Course Coordinator

HOD

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE ON CS0703-"VIRTUALIZATION"

<u>SELF FRAMED SYLLABUS</u>

<u>MODULE 1-INTRODUCTION:</u>

System Architectures – Virtual Machine Basics – Process Virtual Machines – System Virtual Machines – Taxonomy of Virtual Machines

<u>MODULE 2-EMULATION:</u>

Emulation: Basic Interpretation – Threaded Interpretation – Pre-Coded and Direct Interpretation

<u>MODULE 3- VLANs:</u>

Layer 3 VRF Instances Layer 2 – VFIs Virtual Firewall Contexts Network Device Virtualization

<u>MODULE 4-KERNEL :</u>

Comparison of Virtualization Technologies: Guest OS, Host OS, Hypervisor, Emulation, Kernel Level – Shared

<u>MODULE 5-Virtual Box :</u>

Server Virtualization: Configuring Server with Server Virtualization, Adjusting and Tuning Virtual Servers, VM Backup and Migration

COURSE OUTCOME:

1. Analyze the virtualization concepts and Hypervisor
2. Apply the Virtualization for real-world applications
3. Install & Configure the different VM platforms
4. Experiment with the VM with various software

Course coordinator.
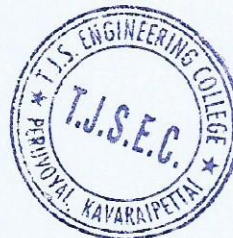
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE ON CS0703-"VIRTUALIZATION"

SCHEDULE

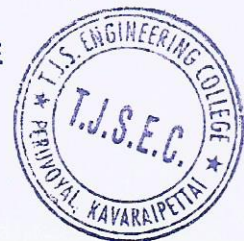| S.NO	DATE	TOPICS TO BE COVERED	HOURS COVERED	RESORCE PERSON
1	26.10.2021	**MODULE1-INTRODUCTION:** • System Architectures • Virtual Machine • Basics Process Virtual Machines System • Virtual Machines	6	Mr. Murali krishanan
2	27.10.2021	**MODULE 2-EMULATION:** • Emulation: Basic Interpretation • Threaded Interpretation • Pre-Coded and Direct Interpretation	6	Mr. Murali krishanan
3	28.10.2021	**MODULE 3- VLANs:** • Layer 3 VRF Instances Layer 2 • VFIs Virtual Firewall Contexts Network Device Virtualization	6	Mr. Murali krishanan
4	29.10.2021	**MODULE 4-KERNEL :** • Comparison of Virtualization Technologies • Kernel Level • Shared	6	Mr. Murali krishanan
5	30.10.2021	**MODULE 5-Virtual Box :** • Server Virtualization: • Adjusting and Tuning Virtual Servers • VM Backup and Migration	6	Mr. Murali krishanan

Total hours : 30

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<u>RESOURCE PERSON DETAILS</u>
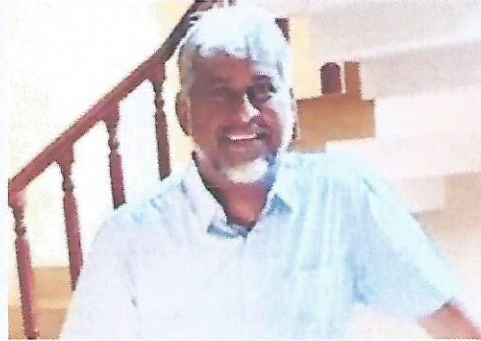
Resource Person: Mr. Murali krishanan

Education   :   BE.,MBA.,

Area of specialization: Data Base Technologies, System release management, Virtualization and techniques.

Papers published: 2

Experience: 25 years

Email-Id: murali.rajendran@zafin.com

Contact :   9884811797

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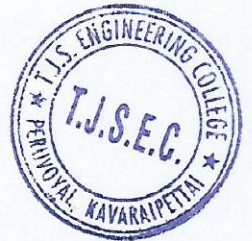
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE ON CS0703-"VIRTUALIZATION"

ASSESSMENT QUESTIONS WITH ANSWER KEY

Marks :   /20

NAME :

YEAR :

DATE :

1)Which of the following is NOT a type of virtualization?

a) Server virtualization

b) Storage virtualization

c) Network virtualization

d) Physical virtualization

2)Which of the following is a hypervisor that runs directly on the host's hardware?

a) Type 1 hypervisor

b) Type 2 hypervisor

c) Type 3 hypervisor

d) Type 4 hypervisor

3)Which of the following is an advantage of virtualization?

a) Increased hardware costs

b) Reduced scalability

c) Improved resource utilization

d) Decreased security

4)Which of the following is a type of server virtualization?

a) Container virtualization

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b) Operating system virtualization

c) Application virtualization

d) All of the above

5)What is the process of creating multiple virtual machines on a single physical machine called?

a) Virtualization

b) Hypervisor

c) Partitioning

d) Clustering

6)Which of the following is a disadvantage of virtualization?

a) Increased security

b) Decreased hardware costs

c) Increased complexity

d) Improved scalability

7)Which of the following is a popular virtualization platform?

a) Microsoft Azure

b) Amazon Web Services

c) VMware vSphere

d) Google Cloud Platform

8)Which of the following is a type of storage virtualization?

a) Network-attached storage (NAS)

b) Storage area network (SAN)

c) Direct-attached storage (DAS)

d) All of the above

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9)What is the process of moving a virtual machine from one physical machine to another called?

a) **Migration**

b) Clustering

c) Partitioning

d) Hypervisor

10)Which of the following is a benefit of container virtualization?

a) Increased isolation

b) Improved performance

c) Reduced overhead

d) **All of the above**

11)What is virtualization?

a) A technique to create virtual people in a video game

b) **A way to create multiple virtual machines on a single physical machine**

c) A method to create virtual reality experiences

d) None of the above

12)Which of the following is NOT a type of virtualization?

a) Server virtualization

b) Storage virtualization

c) Network virtualization

d) **Physical virtualization**

13)Which of the following is a type of hypervisor?

a) Type 1 hypervisor

b) Type 2 hypervisor

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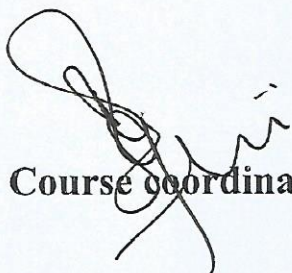TJS Nagar, Peruvoyal, Near Kavaraipettai, Gummidipoondi Taluk, Thiruvallur District -601206

c) Type 3 hypervisor

d) All of the above

14)Which of the following is a type of operating system virtualization?

a) Container virtualization

b) Hardware virtualization

c) Network virtualization

d) Application virtualization

15)Which of the following is a benefit of server virtualization?

a) Increased hardware costs

b) Reduced scalability

c) Improved resource utilization

d) Decreased security

16)Which of the following is a disadvantage of virtualization?

a) Increased security

b) Decreased hardware costs

c) Increased complexity

d) Improved scalability

17)Which of the following is a popular open-source hypervisor?

a) VMware ESXi

b) Microsoft Hyper-V

c) Xen

d) Oracle VirtualBox

18)Which of the following is a type of network virtualization?

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a) Virtual private network (VPN)

b) Virtual local area network (VLAN)

c) Virtual storage area network (VSAN)

d) All of the above

19)Which of the following is a benefit of storage virtualization?

a) Increased data redundancy

b) Decreased storage capacity

c) Improved storage utilization

d) None of the above

20)Which of the following is a process used to move a virtual machine from one physical machine to another?

a) Partitioning

b) Migration

c) Clustering

d) None of the above

Course coordinator

HOD

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Department of Computer science and Engineering

VALUE ADDED COURSE ON CS0703-"VIRTUALIZATION"

ASSESSMENT QUESTIONS

Marks : 19 /20

NAME : S. Poornitha

YEAR : IV

DATE : 30/10/21

1) Which of the following is NOT a type of virtualization?

a) Server virtualization

b) Storage virtualization

c) Network virtualization

d) Physical virtualization

2) Which of the following is a hypervisor that runs directly on the host's hardware?

a) Type 1 hypervisor

b) Type 2 hypervisor

c) Type 3 hypervisor

d) Type 4 hypervisor

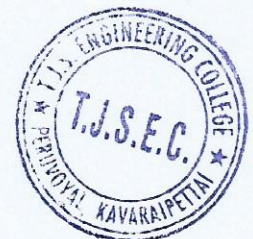3) Which of the following is an advantage of virtualization?

a) Increased hardware costs

b) Reduced scalability

c) Improved resource utilization

d) Decreased security

4) Which of the following is a type of server virtualization?

a) Container virtualization

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b) Operating system virtualization

c) Application virtualization

d) All of the above

5) What is the process of creating multiple virtual machines on a single physical machine called?

a) Virtualization

b) Hypervisor

c) Partitioning

d) Clustering

6) Which of the following is a disadvantage of virtualization?

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c) Increased complexity

d) Improved scalability

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a) Microsoft Azure

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c) VMware vSphere

d) Google Cloud Platform

8) Which of the following is a type of storage virtualization?

a) Network-attached storage (NAS)

b) Storage area network (SAN)

c) Direct-attached storage (DAS)

d) All of the above

9) What is the process of moving a virtual machine from one physical machine to another called?

a) Migration

b) Clustering

c) Partitioning

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d) Hypervisor

10) Which of the following is a benefit of container virtualization?

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b) Improved performance

c) Reduced overhead

d) All of the above

11) What is virtualization?

a) A technique to create virtual people in a video game

b) A way to create multiple virtual machines on a single physical machine

c) A method to create virtual reality experiences

d) None of the above

12) Which of the following is NOT a type of virtualization?

a) Server virtualization

b) Storage virtualization

c) Network virtualization

d) Physical virtualization
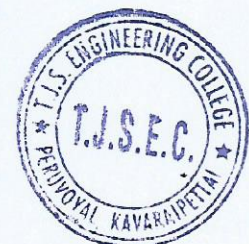
13) Which of the following is a type of hypervisor?

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b) Type 2 hypervisor

c) Type 3 hypervisor

d) All of the above

14) Which of the following is a type of operating system virtualization?

a) Container virtualization

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b) Hardware virtualization

c) Network virtualization

d) Application virtualization

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b) Reduced scalability

c) Improved resource utilization

d) Decreased security

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17) Which of the following is a popular open-source hypervisor?

a) VMware ESXi

b) Microsoft Hyper-V

c) Xen

d) Oracle VirtualBox

18) Which of the following is a type of network virtualization?

a) Virtual private network (VPN)

b) Virtual local area network (VLAN)

c) Virtual storage area network (VSAN)

d) All of the above

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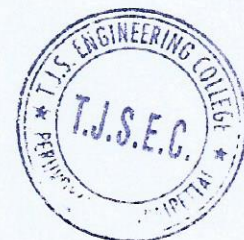
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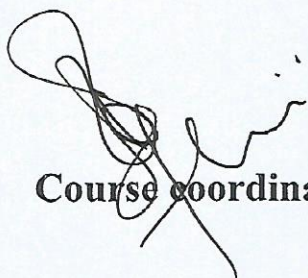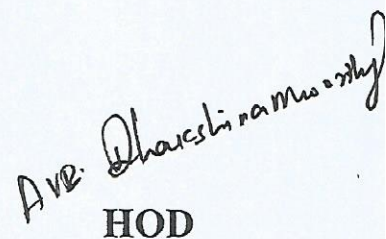
19) Which of the following is a benefit of storage virtualization?

a) Increased data redundancy

b) Decreased storage capacity

c) Improved storage utilization

d) None of the above
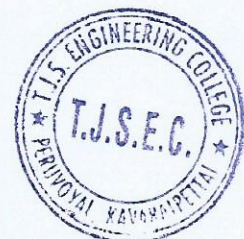

20) Which of the following is a process used to move a virtual machine from one physical machine to another?

a) Partitioning

b) Migration

c) Clustering

d) None of the above

Course coordinator

HOD

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE ON CS0703-"VIRTUALIZATION"

IV YEAR MARK LIST

| S. No.	Register No.	Student Name	MARKS (20)	MARKS (100)
1	112818104001	AASHIKA. K.	18	99
2	112818104002	ABAKA CHARAN SAI	19	98
3	112818104003	ABINAYA. D.	15	96
4	112818104004	ANDALAMALA SHABARISH	16	95
5	112818104005	ASHNI. A. R.	17	85
6	112818104006	BALAJI. A.	18	89
7	112818104007	BALAJI. B.	19	91
8	112818104008	BALAJI. S.	16	92
9	112818104009	BHARATHI RAJA. K.	18	94
10	112818104010	BHARGAVI. P.	19	98
11	112818104011	BHUVANESWARI. V.	15	97
12	112818104013	DINESH. D	18	85
13	112818104014	DINESH BABU. N.	16	89
14	112818104015	DIVYA. K.	19	90
15	112818104016	GOWRI SANKAR. K. B.	20	82
16	112818104017	GUDUR VARSHITH	19	95
17	112818104018	GURRAM LIKITHA	18	86
18	112818104019	JAYALAKSHMI S	16	87
19	112818104020	JEBASTI SANJANA. S.	18	91
20	112818104021	JEEVA. V.	17	90

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Thiruvallur Dist - 601 206!
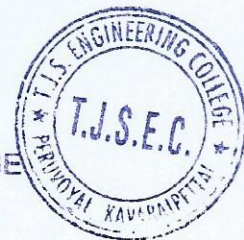
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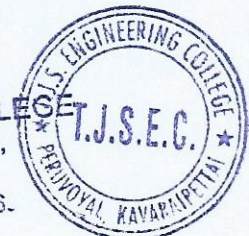**Accredited by NAAC / ISO 9001:2015 Certified Institution.**
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21	112818104022	JEEVITHA. S.	19	95
22	112818104023	JOSHUA. J.	20	87
23	112818104024	JOTHIKA. A.	19	95
24	112818104025	KAARTHICK RAJ. T.	18	90
25	112818104026	KATDHIRI JAYASURYA	20	91
26	112818104027	KANI AMUDHAN. S.	18	98
27	112818104028	KARTHIKA. K. S.	19	97
28	112818104029	KEERTHANA. R.	20	95
29	112818104030	LAVANYA. K.	19	92
30	112818104031	LEELAVATHI. K.	18	96
31	112818104032	LOKESH G	19	97
32	112818104034	MARIMUTHU P	20	94
33	112818104035	MOSES STEPHEN ARULRAJ. S.	18	92
34	112818104036	MUGILA. K.	16	98
35	112818104037	MYLAM SOWMYA	19	89
36	112818104038	NARRA SREE DIVYA	20	87
37	112818104040	PAUL DHINAKARAN. J.	18	88
38	112818104041	POORNITHA. S.	19	85
39	112818104042	PRASANTH. R.	18	87
40	112818104043	PRATHEEBA. T.	17	98
41	112818104044	PRAVEEN KUMAR M	16	97
42	112818104045	PRINCYAVANTHIKA R	17	91
43	112818104048	SHARMI V	19	98
44	112818104049	SIDDARTHAN. S.	20	82

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Gummidipoondi Taluk,
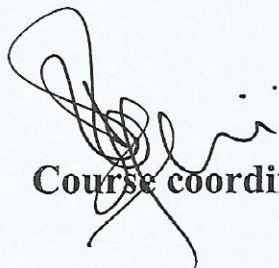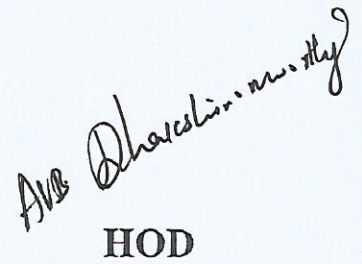Thiruvallur Dist - 601 206.

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45	112818104050	SRIKANTH V G	19	98
46	112818104051	SUBHASHINI A	19	95
47	112818104052	SUDHALAGUNTA LOKESH	19	97
48	112818104053	UYYALA MAHESWAR REDDY	18	92
49	112818104054	VAISHNAVI. S.	16	94
50	112818104301	HARISH KUMAR	17	97
51	112818104302	KOKILA	19	95
52	112818104901	AHAMED ASIK	18	96

Course coordinator

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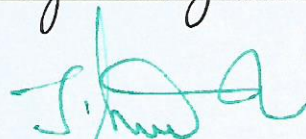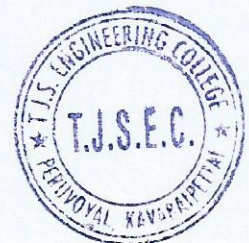
Department of Computer science and Engineering

VALUE ADDED COURSE ON CS0703-"VIRTUALIZATION"

IV YEAR ATTENDANCE

S. No.	Register No.	Student Name	26/10/21	27/10/21	28/10/21	29/10/21	30/10/21
1	112818104001	AASHIKA. K.					
2	112818104002	ABAKA CHARAN SAI	Sai	Sai	Sai	Sai	Sai
3	112818104003	ABINAYA. D.					
4	112818104004	ANDALAMALA SHABARISH					
5	112818104005	ASHNI. A. R.	Ashni.AR	Ashni.AR	Ashni.AP	Ashni.AP	Ashni.A.P
6	112818104006	BALAJI. A.	Balaji.A	Balaji.A	Balaji.A	Balaji.A	Balaji.A
7	112818104007	BALAJI. B.					
8	112818104008	BALAJI. S.					
9	112818104009	BHARATHI RAJA. K.	Bharath	Bharath	Bharath	Bharath	Bharath
10	112818104010	BHARGAVI. P.	Bargavi	Bargavi	Bargavi	Bargavi	Bargavi
11	112818104011	BHUVANESWARI. V.					
12	112818104013	DINESH. D					
13	112818104014	DINESH BABU. N.					
14	112818104015	DIVYA. K.	Divya	Divy	Divy	Divy	Divy
15	112818104016	GOWRI SANKAR. K. B.					
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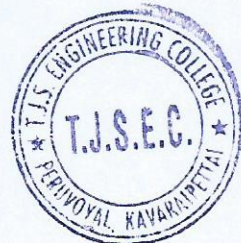Accredited by NAAC / ISO 9001:2015 Certified Institution.
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43	112818104048	SHARMI V					
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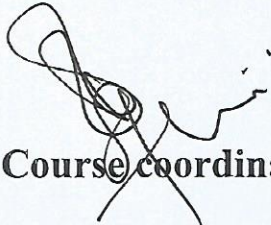Thiruvallur Dist - 601 206.
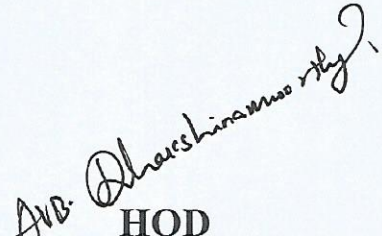
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51	112818104302	KOKILA					
52	112818104901	AHAMED ASIK					

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T.J.S. ENGINEERING COLLEGE

DEPARTMENT OF
COMPUTER SCIENCEAND ENGINEERING

CERTIFICATE
OF COURSE COMPLETION

This is to certified that Mr/Ms. **S · POORNITHA** has successfully completed a value added course on **CS0703 − Virtualization** conducted from **26/10/21 to 30/10/21** organized by Department of CSE, T.J.S. Engineering College, Thiruvallur.

HOD / CSE

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Thiruvallur Dist - 601 206.

Principal

T.J.S. ENGINEERING COLLEGE

DEPARTMENT OF
COMPUTER SCIENCEAND ENGINEERING

CERTIFICATE
OF COURSE COMPLETION

This is to certified that Mr/Ms. **K. MUGILA** has successfully completed a value added course on **CSO703 - Virtualization** conducted from **26/10/21 to 30/10/21** organized by Department of CSE, T.J.S. Engineering College, Thiruvallur.

AVB. Dhakshinamoorthy

HOD / CSE

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T.J.S. ENGINEERING COLLEGE Principal
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE ON CS0703-"VIRTUALIZATION"

REPORT

Course code & name : CS0703 &Virtualization

Year offered   :   IV year CSE

Course coordinator : MS.Pavithra.V

Course type :   Value added course

Course outcome:

The student will be able to understand the bacics of Virtualization. The aim of virtualization is to learn how to create a virtual machine.

Course type : value added course

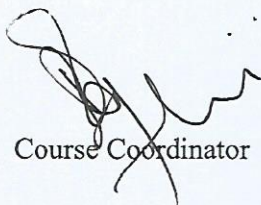Assessment mode : Offline

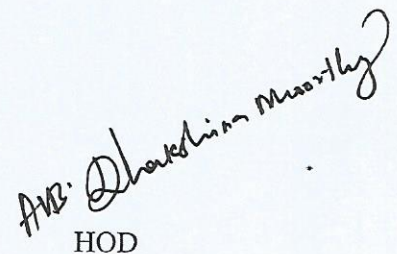Number of students Enrolled :   52
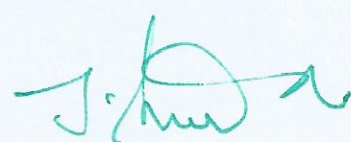
Scheme of Exam : MCQ

Number of students appeared : 52

Number of passed : 52

Date of exam   : 30/10/2021

Course Coordinator

HOD

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE - CS0703- VIRTUALIZATION

STUDENT FEED-BACK

NAME: B. Balaji

YEAR: IV

DATE: 30/10/21.

1. The instructor was well prepared for class

   a. Satisfactory   b. good   c. excellent   d. poor

2. The instructor was organized and used class time efficiently

   a. Yes   b. No

3. The instructor p[resented course material in a clear manner that facilitated understanding

   a. Satisfactory   b. good   c. excellent   d. poor

4. This class has increased my interest in this field of study.

   a. Yes   b. No

5. The reading were appropriate to the goals of the course.

   a. Satisfactory   b. good   c. excellent   d. poor

6. I have put a great deal of effort into advancing my learning in this course

   a. Yes   b. No

7. The grading practices were fair

   a. Yes   b. No

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VALUE ADDED PROGRAM

CS0402- MACHINE LEARNING

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03-12-2021

PERMISSION LETTER

From

 Mr.A.V.B.DhakshinamoorthyM.E.,

 Head of Department

 Computer Science and Engineering,

 TJS Engineering College,

 Peruvoyal,

 Thiruvellore district.

To

 The Principal

 TJS Engineering College,

 Peruvoyal,

 Thiruvellore district.

Respected Sir,

  Sub: Permission to offer value added course–Requested–Reg

   I wish to inform you that, we have planned to conduct value added course on CS0402'Machine Learning'for II Year B.E Computer science and Engineering students of strength 35 from 08.12.2021 to 14.12.2021.In this regard, permission may kindly be granted to offer the following value added course.

Thanking You

Yours Sincerely,

A.V.B.Dhakhinamoorthy/HOD

PRINCIPAL
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Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist.- 601 206.

T.J.S ENGINEERING COLLEGE

Ref: TJSEC/CSE/CIR/21-22/VAC002   Date: 5.12.2021

CIRCULAR

It is hereby informed that Department of Computer Science and Engineering is planning to conduct a value added course on CS0402 "Machine Learning" on 08.12.2021 to 14.12.2021 at Placement Seminar Hall for II year CSE students of strength 35. Hence all the Heads of the departments, faculty members and students of II year CSE are requested to attend the Program.

Principal

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1. IQAC

2. All HoDs (to circulate among their staff members & students)

3. Library

4. Notice Board

5. File

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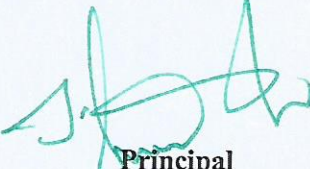TJS Nagar, Peruvoyal, Near Kavaraipettai, Gummidipoondi Taluk, Thiruvallur District -601206

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE "CS0402-Machine Learning"

Brochure

T.J.S. ENGINEERING COLLEGE

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Organizing
Five days Value Added Course on

CS0402

MACHINE LEARNING TECHNIQUES

Resource Person
Mr. Shanmuga Sundaram

For II nd Year CSE Students

Date	Time	Venue
08.12.2021 to 14.12.2021	9.00 to 3.30 pm	TJSEC Seminar Hall

Mrs. S.V. Priyanka, M.E.,
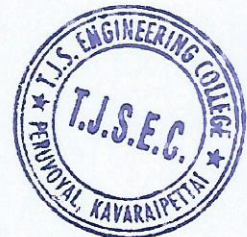Assistant Professor / CSE
Staff Co ordinator

Mr. A.V.B. Dhakshina Moorthy
HOD Department of CSE

Dr. J. Prakash, M.E., Ph.D.,
Principal

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE "CS0402-Machine Learning"

II YEAR NAME LIST

S. No.	Register No.	Student Name
1	112820104001	ABDUL IMRAN. A
2	112820104002	MANUGUNTA DEVI PRASANTHI
3	112820104003	DILLIVEL. N
4	112820104004	ISHWARYA. R
5	112820104005	KUMAR. V
6	112820104006	LIDIYA ANGEL .U
7	112820104007	LOKESHWARI. S
8	112820104008	NANDHINI. S
9	112820104009	NARMADHA. N
10	112820104010	NIRBHAY KUMAR . A
11	112820104011	PANTHAGANI PRAMOD KUMAR
12	112820104012	POOJA .B
13	112820104013	POOJA .V
14	112820104014	POONGUZHALI. B
15	112820104015	ROHITH .S
16	112820104016	SANJAI .S
17	112820104017	SARANRAJ. S
18	112820104019	THARANI. S
19	112820104020	USHA .G.B
20	112820104021	VENKATESH .S.S
21	112820104022	VENKATRAMAN .K
22	112820104023	VINITHA . S

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Peruvoyal, Kavaraipettai,
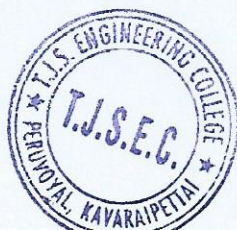Gummidipoondi Taluk,
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23	112820104024	VITHUN .V.S
24	112820104025	VUNNAM SANTHOSH
25	112820104301	ANJUTHA R
26	112820104302	BALAJI J
27	112820104303	HARISH BALA
28	112820104304	PAVITHRA K
29	112820104305	POOJA
30	112820104306	POOJA DHARSHINI
31	112820104307	RAGUL SANJAI A
32	112820104308	RANJITH
33	112820104309	SANJAI .J.N
34	112820104310	SURYA
35	112820104701	BARATH

Course coordinator

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
VALUE ADDED COURSE "CS0402-Machine Learning"
SELF FRAMED SYLLABUS

MODULE 1- INTRODUCTION:

Introduction to ML- Introduction to ML- Introduction to ML- Reinforcement Learning-

Multivariate Regression- Linear Classification

MODULE 2- LEARNING TECHNIQUES :

Unsupervised Learning- Partial Least Squares- Logistic Regression- Supervised Learning-

Shrinkage Methods- Support Vector Machines- Artificial Neural Networks

MODULE 3-NETWORKS:

Support Vector Machines- Artificial Neural Networks- Regression Trees- Hinge Loss

Formulation- Training and Validation- Decision Trees

MODULE 4-CLUSTERING:

Perceptron Learning- Parameter Estimations- Decision Trees Examples

Clustering- Expectation Maximization- Reinforcement Learning- Birch and Cure Algorithms

MODULE 5-MODELS:

Hidden Markov Models- Evaluation Measures- Ensemble Methods- Bayesian Networks-

Ensemble Methods- Variable Elimination.

COURSE OUTCOMES:

- Understand a wide variety of learning algorithms.
- Understand how to evaluate models generated from data.
- Apply the algorithms to a real problem, optimize the models learned and report on the expected accuracy that can be achieved by applying the models.

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE "CS0402-Machine Learning"

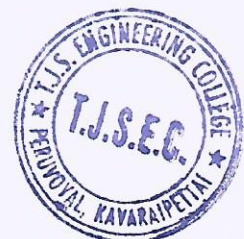## SCHEDULE

S.NO	DATE	TOPICS TO BE COVERED	HOURS COVERED	RESORCE PERSON
1	08.12.2021	**MODULE 1- INTRODUCTION:** • Introduction to ML • Reinforcement Learning • Multivariate Regression • Linear Classification	6	Mr.Shanmuga Sundaram
2	09.12.2021	**MODULE 2- LEARNING TECHNIQUES :** • Unsupervised Learning • Partial Least Squares • Logistic Regression • Supervised Learning	6	Mr.Shanmuga Sundaram
3	10.12.2021	**MODULE 3-NETWORKS:** • Shrinkage Methods • Support Vector Machines • Artificial Neural Networks	6	Mr.Shanmuga Sundaram
4	13.12.2021	**MODULE 4-CLUSTERING:** • Perceptron Learning • Parameter Estimations • Decision Trees Examples Clustering • Expectation Maximization • Reinforcement Learning • Birch and Cure Algorithms	6	Mr.Shanmuga Sundaram
5	14.12.2021	**MODULE 5-MODELS:** • Hidden Markov Models • Evaluation Measures • Ensemble Methods • Bayesian Networks • Ensemble Methods • Variable Elimination	6	Mr.Shanmuga Sundaram

Total hours : 30

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE "CS0402-Machine Learning"

RESOURCE PERSON DETAILS

Resource person: Mr.Shanmuga Sundaram

Education   :ME(CSE) from college of Engineering ,Guindy, Anna university

Area of specialization: Artificial intelligence, Data base ,Data science and business analytics, python, R and Julia.

Papers published: 15

Experience: Teaching 25 years and IT- Industry- 5 years

Email : mshans@gmail.com

Contact: 9790972638

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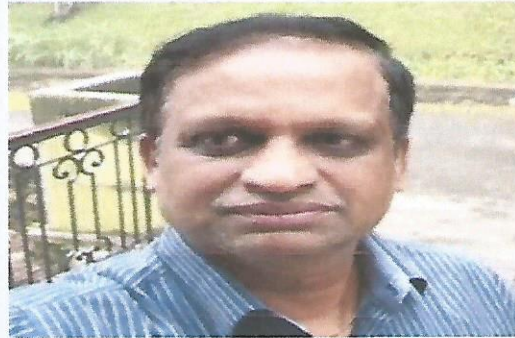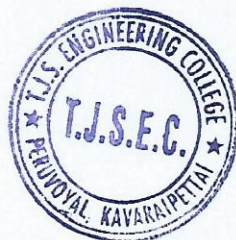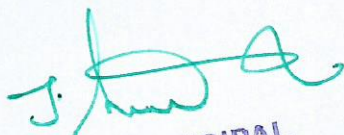Thiruvallur Dist - 601 206,

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE "CS0402-Machine Learning"

ASSESSMENT QUESTIONS WITH ANSWER KEY

Name :

Year :

Date :   Marks :   /20

1)What is machine learning?

a) A method to program machines to perform specific tasks

b) A technique to create virtual reality experiences

c) A way to create multiple virtual machines on a single physical machine

d) None of the above

2)What are the two main categories of machine learning?

a) Unsupervised and supervised learning

b) Deep and shallow learning

c) Reinforcement and unsupervised learning

d) None of the above

3)Which of the following is a supervised learning algorithm?

a) K-means clustering

b) Random forest

c) Principal component analysis

d) None of the above

4)Which of the following is a supervised learning algorithm?

a) K-means clustering

b) Linear regression

c) K-nearest neighbors (KNN)

d) None of the above

5)Which of the following is an unsupervised learning algorithm?

a) Random forest

b) Gradient boosting

c) K-means clustering

d) None of the above

6)What is the purpose of the training set in machine learning?

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a) To train the model to make predictions

b) To evaluate the performance of the model

c) To test the model on new data

d) None of the above

7)What is overfitting in machine learning?

a) When a model is too simple and cannot generalize well

b) When a model is too complex and memorizes the training data

c) When a model is not able to learn from the training data

d) None of the above

8)Which of the following is a type of neural network?

a) Decision tree

b) Convolutional neural network (CNN)

c) Random forest

d) None of the above

9)Which of the following is used to measure the performance of a classification model?

a) Mean squared error (MSE)

b) Receiver Operating Characteristic (ROC) curve

c) R-squared (R2)

d) None of the above

10)Which of the following is used to measure the performance of a regression model?

a) Precision

b) Recall

c) Mean absolute error (MAE)

d) None of the above

11)Which of the following is a popular machine learning library in Python?

a) NumPy

b) SciPy

c) Pandas

d) Scikit-learn

12)What is the purpose of cross-validation in machine learning?

a) To train the model on all available data

b) To evaluate the performance of the model on new data

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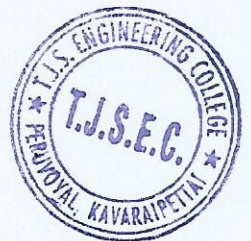Thiruvallur Dist - 601 206.

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c) To prevent overfitting

d) None of the above

13)Which of the following is a technique used to preprocess data in machine learning?

a) One-hot encoding   b) Principal Component Analysis (PCA)

c) Feature scaling   **d) All of the above**

14) which of theb factors affect the performance of learner system does not include?

a) Representation scheme used

b) Training scenario

c) Type Of feed back

d) Good Data structure

15) in language understanding, the levels of knowledge that does not include?

a) Phonologoical   b) Synatactic

c) Emperical   d) Logical

16) Identify wheather True or False: In PCA the number of input dimensions is equal to principle components

a) True   b) False

17) Choose wheather the following statemnts is true or false: The back propogation law is also known as generalized delta rule

a) True   b) False

18) Choose that the following statemnts is True or False: True eror is define over the entire instance space, and not just over training data

a) True   b) False

19) Choose that the following statemnts is True or False:Artificial intelligence is the process that allows a computer to learn and make decisions like humans

a) True   b) False

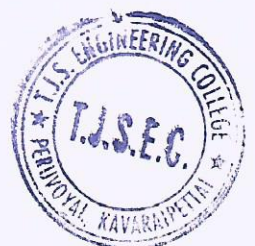20) Choose that the following statemnts is True or False:Decision tree cannot be used for clustering

a) True   b) False

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE "CS0402-Machine Learning"

ASSESSMENT QUESTIONS

Name : V. Pooja .

Year : II

Date : CSE   Marks : 17/20

1) What is machine learning?

a) A method to program machines to perform specific tasks

b) A technique to create virtual reality experiences

c) A way to create multiple virtual machines on a single physical machine

d) None of the above

2) What are the two main categories of machine learning?

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a) To train the model to make predictions

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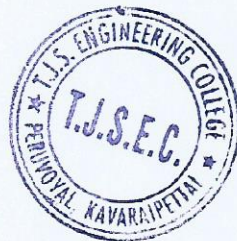Gummidipoondi Teluk,
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c) To prevent overfitting

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19) choose that the following statemnts is True or False: Artificial intelligence is the process that allows a computer to learn and make decisions like humans

a) True   b) False

20) choose that the following statemnts is True or False: Decision tree cannot be used for clustering

a) True   b) False

17/20

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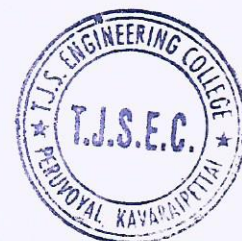
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VALUE ADDED COURSE "CS0402-Machine Learning"

II YEAR Mark list

S. No.	Register No.	Student Name	Marks (20)	Marks (100)
1	112820104001	ABDUL IMRAN. A	20	100
2	112820104002	MANUGUNTA DEVI PRASANTHI	18	90
3	112820104003	DILLIVEL. N	16	80
4	112820104004	ISHWARYA. R	16	80
5	112820104005	KUMAR. V	17	85
6	112820104006	LIDIYA ANGEL .U	19	95
7	112820104007	LOKESHWARI. S	20	100
8	112820104008	NANDHINI. S	19	95
9	112820104009	NARMADHA. N	15	75
10	112820104010	NIRBHAY KUMAR . A	17	85
11	112820104011	PANTHAGANI PRAMOD KUMAR	19	95
12	112820104012	POOJA .B	18	90
13	112820104013	POOJA .V	17	85
14	112820104014	POONGUZHALI. B	18	90
15	112820104015	ROHITH .S	19	95
16	112820104016	SANJAI .S	16	80
17	112820104017	SARANRAJ. S	17	85
18	112820104019	THARANI. S	18	90
19	112820104020	USHA .G.B	15	75
20	112820104021	VENKATESH .S.S	19	95
21	112820104022	VENKATRAMAN .K	17	85
22	112820104023	VINITHA . S	18	90

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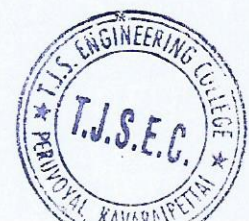TJS Nagar, Peruvoyal, Near Kavaraipettai, Gummidipoondi Taluk, Thiruvallur District -601206

23	112820104024	VITHUN .V.S	16	80
24	112820104025	VUNNAM SANTHOSH	15	75
25	112820104301	ANJUTHA R	18	90
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31	112820104307	RAGUL SANJAI A	19	95
32	112820104308	RANJITH	18	90
33	112820104309	SANJAI .J.N	17	85
34	112820104310	SURYA	15	75
35	112820104701	BARATH	17	85

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE "CS0402-Machine Learning"

II YEAR ATTENDANCE

S. No.	Register No.	Student Name	8/12/21	9/12/21	10/12/21	13/12/21	14/12/21
1	112820104001	ABDUL IMRAN. A					
2	112820104002	MANUGUNTA DEVI PRASANTHI					
3	112820104003	DILLIVEL. N					
4	112820104004	ISHWARYA. R					
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18	112820104019	THARANI. S					
19	112820104020	USHA .G.B					
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Course coordinator

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CERTIFICATE
OF COURSE COMPLETION

This is to certified that Mr/Ms. Vunnam Santhosh has successfully completed a value added
course on CS0402 , Machine Learning conducted from 8/12/21 to 14/12/21
organized by Department of CSE, T.J.S. Engineering College, Thiruvallur.

A.B. Dhaickswoorthy

HOD / CSE

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Principal

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DEPARTMENT OF
COMPUTER SCIENCEAND ENGINEERING

CERTIFICATE
OF COURSE COMPLETION

This is to certified that Mr/Ms. __V . pooja__ has successfully completed a value added course on __CS0402 Machine learning__ conducted from __8/12/21__ to __14/12/21__ organized by Department of CSE, T.J.S. Engineering College, Thiruvallur.

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE "CS0402-Machine Learning"

REPORT

Course code & name : CS0402&Machine learning

Year offered   : II year CSE

Course coordinator : Mrs. Priyanka S.V

Course type : Value added course

Course outcome:

The student will be able to understand the bacics of machine learning. The aim of machine learning is to allow computers to learn automatically without human interaction.

Course type : value added course

Assessment mode : offline

Number of students Enrolled : 35
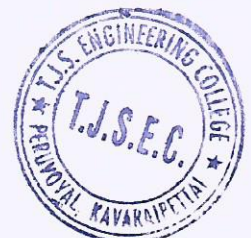
Scheme of Exam : MCQ

Number of students appeared : 35

Number of passed : 35

Date of exam   : 14/12/2021

Course Coordinator

HOD

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

NAME :- B. Pooja   VALUE ADDED COURSE - "CS0402-Machine Learning"

YEAR :- II

DATE :- 14/12/21

STUDENT FEED-BACK

1. The instructor was well prepared for class

   a. Satisfactory   b. good   c. excellent ✓   d. poor

2. The instructor was organized and used class time efficiently

   a. Yes ✓   b. No

3. The instructor p[resented course material in a clear manner that facilitated understanding

   a. Satisfactory   b. good   c. excellent ✓   d. poor

4. This class has increased my interest in this field of study.

   a. Yes ✓   b. No

5. The reading were appropriate to the goals of the course.

   a. Satisfactory   b. good ✓   c. excellent   d. poor

6. I have put a great deal of effort into advancing my learning in this course

   a. Yes ✓   b. No

7. The grading practices were fair

   a. Yes ✓   b. No

HOD

Course Coordinator
Priyanka. S.V.
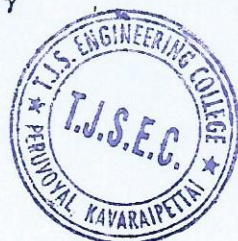
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601206**

VALUE ADDED PROGRAM

CS0601-DATA SCIENCE

T.J.S ENGINEERING COLLEGE

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TJS Nagar, Peruvoyal, Near Kavaraipettai, Gummidipoondi Taluk, Thiruvallur District -601206

15-05-2022

PERMISSION LETTER

From

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

Head of Department

Computer Science and Engineering,

TJS Engineering College,

Peruvoyal,

Thiruvallur district.

To

The Principal

TJS Engineering College,

Peruvoyal,

Thiruvallur district.

Respected Sir,

Sub: Permission to offer value added course – Requested –Reg

I wish to inform you that, we have planned to conduct value added course on CS0601- "Data science" for III YEAR B.E Computer science and Engineering students of strength 65 from 19.05.2022 to 25.05.2022. In this regard, permission may kindly be granted to offer the following value added course.

Thanking You

Yours Sincerely,

(S.ANBU)

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Ref: TJSEC/CSE/CIR/21-22/010   Date: 16.05.2022

CIRCULAR

It is hereby informed that Department of Computer Science and Engineering is planning to conduct a Value added Course on CS0601-"Data Science" on 19.05.2022 to 25.05.2022 at Placement Seminar Hall for III year CSE Students of strength 65 students. Hence all the Heads of the departments, faculty members and students of III year CSE are requested to attend the Program.

Principal
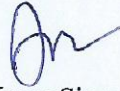**PRINCIPAL**
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Copy to

1. IQAC
2. All HoDs (to circulate among their staff members & students)
3. Library
4. Notice Board
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE on CS0601 "DATA SCIENCE

Brochure

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Organizing
Five days Value Added Course on

DATA SCIENCE

Course Code : CS0601

Resource Person
Mr.MUHAMMED ILYAS
CEO, IT Expert Training, Chennai,
ilyas@tripleminfotech.com.

For IIIrd Year CSE Students
Date
19.05.2022
to
25.05.2022
Time
9.00 to 3.30 pm
Venue
TJSEC Seminar Hall

Mrs. J. Agnes, B.E., M.E (CSE)
Assistant Professor / CSE
Staff Co ordinator

Dr. S. Anbu, M.E., Ph.D.,
HOD / Department of CSE

Dr. J. Prakash, M.E., Ph.D.,
Principal

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE on CS0601"DATA SCIENCE"

III YEAR STUDENTS NAME LIST

S. No.	Register No.	Student Name
1	112819104002	AJITH L
2	112819104003	AKASH TIWARI N
3	112819104004	AKSHAYA V
4	112819104005	ARCHANA I
5	112819104006	BALUSUNDAR T S
6	112819104007	BANDLA VENU MADHAV
7	112819104008	BOLLEDDU GNANESWARI
8	112819104009	CHIMMILI BHANU CHANDRA
9	112819104010	DEEPIKA D
10	112819104011	EZHILARASI C
11	112819104012	GOWTHAM R
12	112819104013	G SAI KUMAR
13	112819104014	INBARAJ J
14	112819104015	INDHUJA S
15	112819104016	JOHNSI KAVERI N
16	112819104017	KAUSALYA S
17	112819104018	KUMAR A
18	112819104019	KUMMARI YASWANTH SAGAR
19	112819104020	LEELA RANI M
20	112819104021	MAHESWARI S
21	112819104022	MARTHALA VAMSI KRISHNA
22	112819104023	MOHAMED ILYAS M
23	112819104024	MOHANA PRASATH A A
24	112819104025	MOHANA PRIYA R

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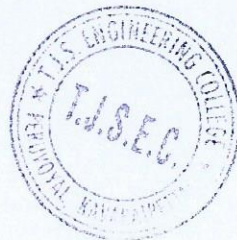
25	112819104026	MOHANRAJ S
26	112819104027	MOHAN RAJ M
27	112819104028	MOHAN RAJ U
28	112819104029	MONIKA V S
29	112819104030	MONISHA P
30	112819104031	MUTHYALA RAMA KRISHNA
31	112819104032	NAGARAJ V
32	112819104033	NAVEEN S
33	112819104034	NISHANTH S
34	112819104035	PADMA PRIYA B
35	112819104036	PRIYADHARSHINI J
36	112819104037	PRIYADHARSHINI M
37	112819104038	RAMYA R
38	112819104039	RAMYA S
39	112819104040	RAVALA GREESHMA
40	112819104041	RAYI PAVAN
41	112819104042	SAI SNEHA M
42	112819104043	SANDHIYA R
43	112819104044	SANTHOSH SWAMY V
44	112819104045	SARAVANAN V
45	112819104046	SATHIYAVANI V
46	112819104048	SHAIK RAJEENA BEGUM
47	112819104049	SHARMILA U
48	112819104050	SHOBANA L
49	112819104051	SILVAN S
50	112819104052	SINDHU K

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51	112819104053	SINDHU V
52	112819104054	SIVA M
53	112819104055	SNEHA M
54	112819104056	SURESH CHELLADURAI
55	112819104057	SURESH KUMAR D
56	112819104058	SWARNA E
57	112819104059	THATIPARTHI ROHITH
58	112819104060	UTUKURU TEJA
59	112819104061	VADINENI SIREESHA
60	112819104062	VANDANA D
61	112819104063	VASANTH G
62	112819104064	VISHNU PRIYA P B
63	112819104301	AKASH
64	112819104303	PRADEEPA GANDHI
65	112819104304	PRASANTH

Course Coordinator

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE – CS0601-DATA SCIENCE

SELF- FRAMED SYLLABUS

MODULE 1:INTRODUCTION

Data Science: Benefits and uses – facets of data - Data Science Process: Overview – Defining research goals – Retrieving data – Data preparation - Exploratory Data

MODULE 2:DESCRIBING DATA

Types of Data - Types of Variables -Describing Data with Tables and Graphs –Describing Data with Averages - Describing Variability - Normal Distributions

MODULE 3:DESCRIBING RELATIONSHIPS

Correlation –Scatter plots –correlation coefficient for quantitative data –computational formula for correlation coefficient – Regression –regression line –least squares regression line
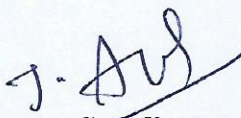
MODULE 4:PYTHON LIBRARIES

Basics of Numpy arrays –aggregations –computations on arrays –comparisons, masks, boolean logic – fancy indexing – structured arrays – Data manipulation with Pandas –

MODULE 5:DATA VISUALIZATION

Importing Matplotlib – Line plots – Scatter plots – visualizing errors – density and contour plots – Histograms – legends – colors – subplots – text and annotation
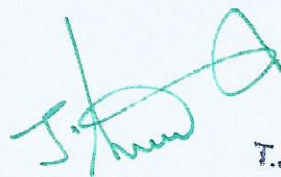
COURSE OUTCOME:

- Define the data science process
- Understand different types of data description for data science process
- Gain knowledge on relationships between data

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE – CS0601-DATA SCIENCE

SCHEDULE

S.NO	DATE	TOPICS TO BE COVERED	HOURS COVERED	RESOURCE PERSON
1	19-05-22	**Module 1: INTRODUCTION:** • Data Science • Benefits and uses • facets of data • Data Science Process:	6	Mr.Muhammed Ilyas CEO,IT expert Training
2	22-05-22	**Module 2: DESCRIBING DATA:** • Types of Data • Types of Variables • Describing Data with Tables and Graphs	6	Mr.Muhammed Ilyas CEO,IT expert Training
3	23-05-22	**Module 3: DESCRIBING RELATIONSHIPS** • Correlation • Scatter plots • correlation coefficient for quantitative data • computational formula for correlation coefficient	6	Mr.Muhammed Ilyas CEO,IT expert Training
4	24-05-22	**Module 4: PYTHON LIBRARIES** • Basics of Numpy arrays aggregations • computations on arrays –comparisons, masks, Boolean	6	Mr.Muhammed Ilyas CEO,IT expert Training
5	25-05-22	**Module 5: DATA VISUALIZATION** • Importing Matplotlib,Line plots • Scatter plots ,visualizing errors • density and contour plots,Histograms • legends ,colors • Subplots,text and annotation	6	Mr.Muhammed Ilyas CEO,IT expert Training

Total hours : 30

Course coordinator

HOD

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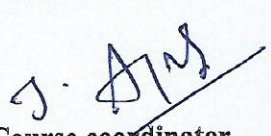TJS Nagar, Peruvoyal, Near Kavaraipettai, Gummidipoondi Taluk, Thiruvallur District -601206

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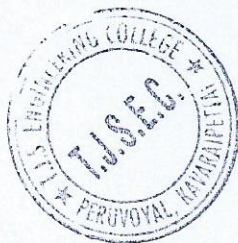### VALUE ADDED COURSE- CS0601-DATA SCIENCE

RESOURCE PERSON DETAILS

Resource Person: **Mr.Muhammed Iyas,CEO, IT Expert Training**

Education   :   M.E (Mechatronics)   From Anna University

Area of specialization: Robotics, IOT, Embedded System,Data Science

Papers published: 2

Experience: Teaching 10 Years

Email-Id: ilyas@live.in

Contact :   9884648010

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE – CS0601-DATA SCIENCE

ASSESSMENT QUESTIONS WITH ANSWER KEY

NAME:

YEAR:

DATE: Marks :   /20

1. Which of the following is not a key skill required for a data scientist?
A) Coding skills
B) Communication skills
C) Statistical skills
D) Management skills

2. Which of the following is not a typical data science task?
A) Data cleaning
B) Data visualization
C) Data mining
D) Data encryption

3. What is the main purpose of exploratory data analysis (EDA)?
A) To clean the data
B) To summarize the data
C) To explore relationships between variables
D) To create a predictive model

4. Which of the following is not a type of data?
A) Categorical
B) Numeric
C) Textual
D) Imaginary

5. Which of the following is not a commonly used data visualization tool?
A) Scatter plot
B) Line chart
C) Bar chart
D) Histogram

6. Which of the following is not a machine learning technique?
A) Linear regression
B) Decision trees
C) K-means clustering
D) Principal component analysis

7. Which of the following is not a commonly used programming language for data science?
A) Python

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B) Java
C) R
D) SQL

8. Which of the following is not a type of supervised learning algorithm?
A) Regression
B) Classification
C) Clustering
D) Ensemble learning

9. Which of the following is not a type of unsupervised learning algorithm?
A) K-means clustering
B) Principal component analysis
C) Random forest
D) Association rule mining

10. Which of the following is not a commonly used data storage format?
A) CSV
B) Excel
C) JSON
D) XML

11. Which of the following is not a step in the data science process?
A) Data cleaning
B) Data analysis
C) Data storage
D) Data visualization

12. Which of the following is not a type of data bias?
A) Selection bias
B) Sampling bias
C) Confirmation bias
D) Predictive bias

13. Which of the following is not a commonly used data preprocessing technique?
A) Feature scaling
B) Feature engineering
C) Feature selection
D) Feature modeling

14. Which of the following is not a commonly used data transformation technique?
A) Normalization
B) Standardization
C) Interpolation
D) Log transformation

15. Which of the following is not a commonly used statistical test?
A) T-test

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15. Which of the following is not a commonly used statistical test?
A) T-test
B) ANOVA
C) Pearson correlation
D) Neural network

16. Which of the following is not a commonly used evaluation metric for a classification problem?
A) Accuracy
B) Precision
C) Recall
D) R-squared

17. Which of the following is not a commonly used evaluation metric for a regression problem?
A) Accuracy
B) Mean squared error
C) R-squared
D) Mean absolute error

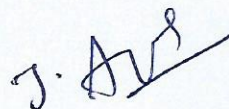**18. Which of the following is not a commonly used ensemble learning technique?**
A) Bagging
B) Boosting
C) Stacking
D) Deep learning

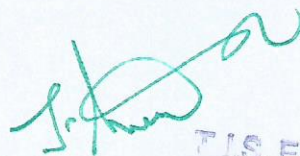**19. Which of the following is not a commonly used deep learning framework?**
A) TensorFlow
B) PyTorch
C) Keras
D) Scikit-learn

20. Which of the following is not a commonly used data science tool?
A) Jupyter Notebook
B) Tableau
C) GitHub
D) Photoshop

Course coordinator

HOD

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE – CS0601-DATA SCIENCE

ASSESSMENT QUESTIONS
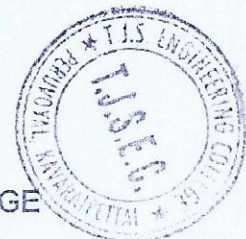
NAME: R. Gowtham

YEAR: III year

DATE: 25/5/22

MARKS : 19/20

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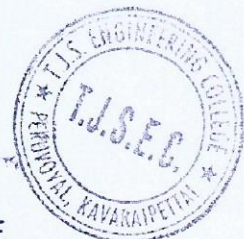B) Standardization
C) Interpolation
D) Log transformation

15. Which of the following is not a commonly used statistical test?

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B) ANOVA
C) Pearson correlation
D) Neural network

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE – CS0601-DATA SCIENCE

Mark list-III YEAR

S. No.	Register No.	Student Name	MARKS (20)	MARKS (100)
1	112819104002	AJITH L	18	90
2	112819104003	AKASH TIWARI N	15	75
3	112819104004	AKSHAYA V	16	80
4	112819104005	ARCHANA I	17	85
5	112819104006	BALUSUNDAR T S	19	95
6	112819104007	BANDLA VENU MADHAV	19	95
7	112819104008	BOLLEDDU GNANESWARI	16	80
8	112819104009	CHIMMILI BHANU CHANDRA	19	95
9	112819104010	DEEPIKA D	18	90
10	112819104011	EZHILARASI C	19	95
11	112819104012	GOWTHAM R	19	95
12	112819104013	G SAI KUMAR	19	95
13	112819104014	INBARAJ J	20	100
14	112819104015	INDHUJA S	18	90
15	112819104016	JOHNSI KAVERI N	18	90
16	112819104017	KAUSALYA S	20	100
17	112819104018	KUMAR A	15	75
18	112819104019	KUMMARI YASWANTH SAGAR	17	85
19	112819104020	LEELA RANI M	19	95

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20	112819104021	MAHESWARI S	20	100
21	112819104022	MARTHALA VAMSI KRISHNA	19	95
22	112819104023	MOHAMED ILYAS M	15	75
23	112819104024	MOHANA PRASATH A A	17	85
24	112819104025	MOHANA PRIYA R	19	95
25	112819104026	MOHANRAJ S	18	90
26	112819104027	MOHAN RAJ M	17	85
27	112819104028	MOHAN RAJ U	20	100
28	112819104029	MONIKA V S	19	95
29	112819104030	MONISHA P	17	85
30	112819104031	MUTHYALA RAMA KRISHNA	19	95
31	112819104032	NAGARAJ V	17	85
32	112819104033	NAVEEN S	19	95
33	112819104034	NISHANTH S	19	95
34	112819104035	PADMA PRIYA B	18	90
35	112819104036	PRIYADHARSHINI J	16	80
36	112819104037	PRIYADHARSHINI M	17	85
37	112819104038	RAMYA R	18	90
38	112819104039	RAMYA S	17	85
39	112819104040	RAVALA GREESHMA	20	100
40	112819104041	RAYI PAVAN	19	95
41	112819104042	SAI SNEHA M	17	85
42	112819104043	SANDHIYA R	19	95

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43	112819104044	SANTHOSH SWAMY V	18	90
44	112819104045	SARAVANAN V	16	80
45	112819104046	SATHIYAVANI V	17	85
46	112819104048	SHAIK RAJEENA BEGUM	18	90
47	112819104049	SHARMILA U	17	85
48	112819104050	SHOBANA L	16	80
49	112819104051	SILVAN S	18	90
50	112819104052	SINDHU K	19	95
51	112819104053	SINDHU V	18	90
52	112819104054	SIVA M	16	80
53	112819104055	SNEHA M	17	85
54	112819104056	SURESH CHELLADURAI	19	95
55	112819104057	SURESH KUMAR D	18	90
56	112819104058	SWARNA E	16	80
57	112819104059	THATIPARTHI ROHITH	17	85
58	112819104060	UTUKURU TEJA	18	90
59	112819104061	VADINENI SIREESHA	17	85
60	112819104062	VANDANA D	17	85
61	112819104063	VASANTH G	19	95
62	112819104064	VISHNU PRIYA P B	18	90
63	112819104301	AKASH	16	80
64	112819104303	PRADEEPA GANDHI	17	85
65	112819104304	PRASANTH	17	85

COURSE COORDINATOR   HOD

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE – CS0601-DATA SCIENCE

ATTENDANCE

S. No.	Register No.	Student Name	19/5/22	2q/5/22	23/5/22	24/8/22	25/5/22
1	112819104002	AJITH L					
2	112819104003	AKASH TIWARI N					
3	112819104004	AKSHAYA V					
4	112819104005	ARCHANA I					
5	112819104006	BALUSUNDAR T S					
6	112819104007	BANDLA VENU MADHAV					
7	112819104008	BOLLEDDU GNANESWARI					
8	112819104009	CHIMMILI BHANU CHANDRA					
9	112819104010	DEEPIKA D					
10	112819104011	EZHILARASI C					
11	112819104012	GOWTHAM R					
12	112819104013	G SAI KUMAR					
13	112819104014	INBARAJ J					
14	112819104015	INDHUJA S					
15	112819104016	JOHNSI KAVERI N					
16	112819104017	KAUSALYA S					
17	112819104018	KUMAR A					

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18	112819104019	KUMMARI YASWANTH SAGAR					
19	112819104020	LEELA RANI M					
20	112819104021	MAHESWARI S					
21	112819104022	MARTHALA VAMSI KRISHNA					
22	112819104023	MOHAMED ILYAS M					
23	112819104024	MOHANA PRASATH A A					
24	112819104025	MOHANA PRIYA R					
25	112819104026	MOHANRAJ S					
26	112819104027	MOHAN RAJ M					
27	112819104028	MOHAN RAJ U					
28	112819104029	MONIKA V S					
29	112819104030	MONISHA P					
30	112819104031	MUTHYALA RAMA KRISHNA					
31	112819104032	NAGARAJ V					
32	112819104033	NAVEEN S					
33	112819104034	NISHANTH S					
34	112819104035	PADMA PRIYA B					
35	112819104036	PRIYADHARSHINI J					
36	112819104037	PRIYADHARSHINI M					
37	112819104038	RAMYA R					
38	112819104039	RAMYA S					
39	112819104040	RAVALA GREESHMA					

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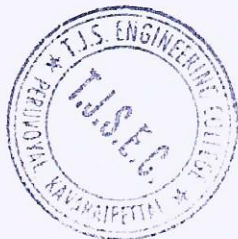Gummidipoondi Taluk,
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40	112819104041	RAYI PAVAN					
41	112819104042	SAI SNEHA M					
42	112819104043	SANDHIYA R					
43	112819104044	SANTHOSH SWAMY V					
44	112819104045	SARAVANAN V					
45	112819104046	SATHIYAVANI V					
46	112819104048	SHAIK RAJEENA BEGUM					
47	112819104049	SHARMILA U					
48	112819104050	SHOBANA L					
49	112819104051	SILVAN S					
50	112819104052	SINDHU K					
51	112819104053	SINDHU V					
52	112819104054	SIVA M					
53	112819104055	SNEHA M					
54	112819104056	SURESH CHELLADURAI					
55	112819104057	SURESH KUMAR D					
56	112819104058	SWARNA E					
57	112819104059	THATIPARTHI ROHITH					
58	112819104060	UTUKURU TEJA					
59	112819104061	VADINENI SIREESHA					
60	112819104062	VANDANA D					
61	112819104063	VASANTH G					

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62	112819104064	VISHNU PRIYA P B					
63	112819104301	AKASH					
64	112819104303	PRADEEPA GANDHI					
65	112819104304	PRASANTH					

Course Coordinator

HOD

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE – CS0601- DATA SCIENCE

Certificate

T.J.S. ENGINEERING COLLEGE

DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING

CERTIFICATE

OF COMPLETION

This is to certify that Mr./Ms. _GOWTHAM. R_ has succesfully completed a value added course on _DATA SCIENCE_ conducted from _19-05-2022_ to _25-05-2022_ organized by Department of Computer Science Engineering, TJS Engineering College Thiruvallur.

HoD

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COMPUTER SCIENCE & ENGINEERING

CERTIFICATE

OF COMPLETION

This is to certify that Mr./Ms. __ARCHANA I__ has succesfully completed a value added course on __DATA SCIENCE__ conducted from __19-05-2022__ to __25-05-2022__ organized by Department of Computer Science Engineering, TJS Engineering College Thiruvallur.
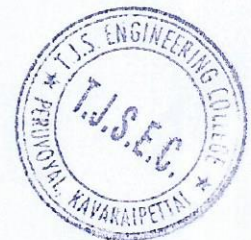
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE - CS0601-DATA SCIENCE

Report

Course code & name : CS0601& Data Science

Year offered : III year CSE

Course coordinator : Mrs. Agnes.J

Course type : Value added course

Course outcome:

The student will be able to understand the objective of the data scientist is to explore, sort and analyze megadata from various sources in order to take advantage of them and reach conclusions to optimize business processes.

Course type : value added course

Assessment mode : offline

Number of students Enrolled : 65

Scheme of Exam : MCQ

Number of students appeared :65

Number of passed : 65

Date of exam : 25/05/2022

Course Coordinator

HOD

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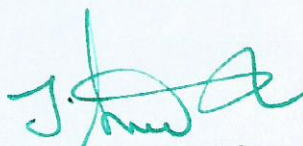## VALUE ADDED COURSE - CS0601 - DATA SCIENCE

STUDENT FEED-BACK

NAME: V- S- Monica

YEAR: III yr

DATE: 25/5/22

1. The instructor was well prepared for class

   a. Satisfactory   b. good   c. excellent   d. poor

2. The instructor was organized and used class time efficiently

   a. Yes   b. No

3. The instructor p[resented course material in a clear manner that facilitated understanding

   a. Satisfactory   b. good   c. excellent   d. poor

4. This class has increased my interest in this field of study.

   a. Yes   b. No

5. The reading were appropriate to the goals of the course.

   a. Satisfactory   b. good   c. excellent   d. poor

6. I have put a great deal of effort into advancing my learning in this course

   a. Yes   b. No

7. The grading practices were fair

   a. Yes   b. No

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