



T.J.S ENGINEERING COLLEGE



Approved by AICTE,
New Delhi & Affiliated to Anna University, Chennai.
Accredited by NAAC / ISO 9001:2015 Certified Institution.
TJS Nagar, Peruvoyal, Near Kavaraipettai, Gummidipoondi Taluk,
Thiruvallur District -601206

1.1.3. Q_nM	Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. <ol style="list-style-type: none">1. Academic council/BoS of Affiliating University2. Setting of question papers for UG/PG programs3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses4. Assessment /evaluation process of the affiliating University <ol style="list-style-type: none">1. All of the above2. Any 3 of the above3. Any 2 of the above4. Any 1 of the above5. None of the above
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Gummidipoondi Taluk, Thiruvallur District -
601206



Setting of Question Papers For UG/PG Programs

**CERTIFICATE OF QUESTION PAPER
SETTING**

COE Office Letter Reference: PEC/COE/QP/Nov-Dec-2021/R-2017/49-1

I Dr. S. Velmurugan hereby certify that the following Question papers given in the table have/has been set in accordance with the instructions to Question Paper setters, Question Paper format and the syllabus for the above subject and other instructions mentioned in the order sent by the **Controller of Examinations, Panimalar Engineering College, Chennai.**

Subject (Code & Title)	Regulation	Sem	Branch	Programme
EC8702 - Ad hoc and Wireless Sensor Networks	R2017	VII	ECE	B.E

It is also certified that the above Question Paper is not a reproduction of any previous year Question Paper of this or any other University.

S. No	Parameter	Yes/ No
1.	Matches the syllabus of Anna University (R-2017).	Yes
2.	According to the level of the programme	Yes
3.	Contains the particulars like Regulation, Degree, Branch, Semester, Subject Code, Title, Duration, Maximum marks.	Yes
4.	Questions are not ambiguous, or/and out of syllabus.	No
5.	Questions are from Text Books and Reference Books provided in the syllabus.	Yes
6.	Test the skills suggested in Blooms's taxonomy	Yes
7.	Part B and Part C have a maximum of three sub divisions.	Yes

Place : TJSEC, Chennai

Signature: 

Date : 25.11.2021

Name & Designation:

Dr. S. Velmurugan

Prof. & Head/ECE1128-TJSEC


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T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavampettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.





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601206



Assessment /evaluation process of the affiliating University



Sri SAI RAM ENGINEERING COLLEGE

An Autonomous Institution | Affiliated to Anna University & Approved by AICTE, New Delhi
Accredited by NBA and NAAC "A+" | An ISO 9001:2015 Certified and MHRD NIRF ranked institution
Sai Leo Nagar, West Tambaram, Chennai - 600 044. www.sairam.edu.in

Founder Chairman : MJF. Ln. Leo Muthu



Date: 10.03.2022

From

The Controller of Examinations
Sri Sairam Engineering College
Chennai 44.

To

Mr. M.VIDHURANKUMAR Mr.
TJS ENGINEERING COLLEGE
8760233696

Sir / Madam,

Sub: Appointment Order for Valuation - Confidential work - Reg.

We wish to inform you that you are appointed as Examiner for Valuation - Nov / Dec Examination, 2021 of our College. Valuation starts from 11.03.2022 and you are requested to report to the CoE office at 9.30 A.M. during the days of valuation at our college. You are eligible to claim remuneration and allowances as per the norms.

The above order has to be kept confidential. We seek your kind cooperation for the successful completion of the Valuation.

Controller of Examinations

PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.



Office of the Controller of Examinations

COE Office: 044-26841061

E-mail id: coel@veltechmultitech.org

Lr. No: VTMT/COE/ESE/UG/R2019/2020-2021/ODD

Date: 12.08.2021

To

Mr. Vidhurankumar,
Assistant Professor,
Department of Mathematics,
TJS Engineering College,
Chennai.

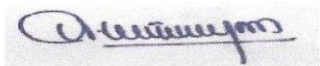
Sir / Madam,

Sub: Appointment of Examiner for the Central valuation of Theory answer scripts April / May Examination, 2021 Examinations - Intimation Reg.

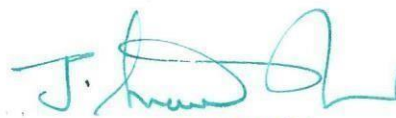
The Central valuation for the April / May End Semester Examination, 2021 of our institution has been scheduled from 13-08-2021 to 14-08-2021 at Vel Tech Multi Tech Dr Rangarajan Dr Sakunthala Engineering College.

You have been appointed as Examiner for the same. I request your kind cooperation for the successful valuation.

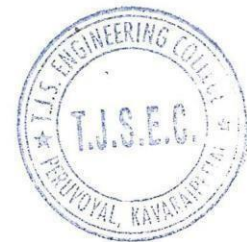
With Regards,



Dr.A.Karthikeyan M.E., Ph.D
(Controller of Examinations)



PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeltai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.



#42, Avadi - Vel Tech Road, Vel Nagar, Avadi, Chennai - 600 062, Tamil Nadu

Contact: 9789037652

www.veltechmultitech.org

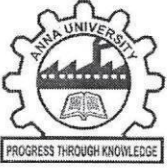


2017 - Band - 151 - 200
2018 - Band - 151 - 200
2019 - Rank - 189



ECE, EEE,
CSE, IT,
MECH,
BIOMEDICAL





ANNA UNIVERSITY :: CHENNAI - 600 025
OFFICE OF THE CONTROLLER OF EXAMINATIONS

Examiner/Asst. Examiner/Chairman/Vice-Chairman - Copy to Home College

13 April 2022

From

The Zonal Coordinator
Anna University
Chennai 25.

To

The Principal
()

Through the Principal

Sir / Madam,

Sub: Appointment of Examiner/Asst. Examiner/Chairman/Vice-Chairman for the Central valuation of Theory answer scripts Nov. / Dec. Examination, 2021 Examinations - Intimation Reg.

The Central valuation for the **Nov. / Dec. Examination, 2021** Examinations is scheduled from **18-04-2022 to 22-04-2022** at **2199 - ZONE II : CHENNAI-II**. The following personnel of your college has/have been appointed as Examiner/Asst. Examiner/Chairman/Vice-Chairman for the same. I request your kind cooperation for the successful valuation.

S.No.	Name of the Faculty	Act as
1	1128051 - ANITHA S	Examiner
2	1128045 - PADMINI R	Examiner

You are requested to ensure that all the faculty members of your college attend the above examination-duties without fail.

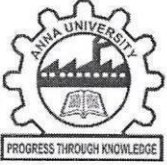
The above orders have to be kept strictly confidential. Your kind cooperation is requested in this regard.

PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Navamimalai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.

Yours Faithfully,

- sd -

Zonal Coordinator



ANNA UNIVERSITY :: CHENNAI - 600 025
OFFICE OF THE CONTROLLER OF EXAMINATIONS
Examiner for Central Valuation

13 April 2022

From

The Zonal Coordinator
Anna University
Chennai 25.

To

All The Principal,
Non- Autonomous Affiliated Colleges.

Madam,

Sub: Central Valuation - Zone 2 Confidential work-Reg.

I am by direction pleased to appoint you as the Examiner for Central Valuation at **ZONE II : CHENNAI-II (2199)** from **18 April 2022 to 22 April 2022**. You are requested to report to the Camp Officer at 8.30 A.M. during the days of central valuation at the above venue. The duties and responsibilities of the Examiner are enclosed herewith for your ready reference and strict adherence. You are eligible to claim remuneration and allowances as per the norms.

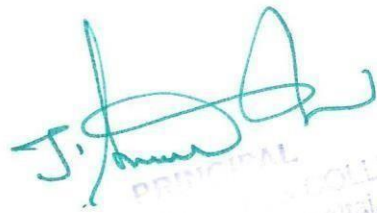
The above orders have to be kept confidential. I seek your kind cooperation for the successful completion of the Central Valuation.

BOARD NAME – 1) PH3151 Engineering Physics
2) HS3151 Professional English - I

yours sincerely,

- sd/-

Zonal Coordinator


PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Pattanam, Chennai,
Gummidipoondi taluk,
Thiruvallur Dist - 601 206.

Zone Code/Name: 21/ZONE II : Chennai-II

Phone No.: 22357249/7250

Email ID: coeazone2@gmail.com



ANNA UNIVERSITY :: CHENNAI - 600 025
OFFICE OF THE CONTROLLER OF EXAMINATIONS

Examiner for Central Valuation

1. The duties of the Examiners are

- a. to value the answer scripts assigned to him/her correctly by going through the entire answer script carefully and spending the full allotted time for the valuation effectively.
- b. to value the answer scripts assigned to him/her based on the key, if provided, and by properly following the minutes of the Pre-valuation Board Meeting.
- c. to fill up the OME sheet by correctly entering the marks awarded in the answer scripts against the correct dummy number of the candidate.
- d. to follow the instructions/guidelines given by the Group Chairman/Chairman.
- e. to bring it to the notice of the Group Chairman/Chairman any appeal made by the candidate in the answer script.
- e. to bring it to the notice of the Group Chairman/Chairman any mix-up in the subject/subject code of answer script.
- e. to bring it to the notice of the Group Chairman/Chairman whenever a sign/evidence for malpractice is noticed in the answer script.

2. The remunerations and allowances

- a. Examiner(UG) Rs.20/- per answer script to a minimum of Rs. 50/- per subject for an examiner. For an official coming from other local college: Rs. 300/- per session subject to a maximum of Rs. 350/- per day. for an official coming from the same college: Rs. 50/- per session.
- b. Examiner(PG) Rs.20/- per answer script to a minimum of Rs. 50/- per subject for an examiner. For an official coming from other local college: Rs. 300/- per session subject to a maximum of Rs. 350/- per day. for an official coming from the same college: Rs. 50/- per session.

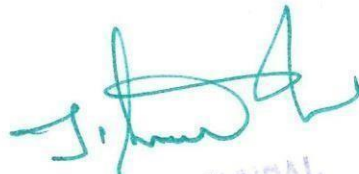
Remarks

Sitting fee of Rs. 200/- may be paid for attending the briefing session on the first day of the valuation, if held.

The number of answer scripts to be valued per session should not exceed 30.

If the Examiner is absent for one of the sessions in a day due to reasons not connected with central valuation, Rs. 175/- only will be paid as 'Allowance to Incidental Expenses'.

You are requested to provide Bank Details such as Account No, Name of the Bank, Branch, IFSC and Mobile no in on-line claim form.


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T.J.S. ENGINEERING COLLEGE
Peravoyal, Madhavipalayam,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.

Zone Code/Name: 21/ZONE II : Chennai-II

Phone No.: 22357249/7250

Email ID: coeazone2@gmail.com



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Design and Development of Curriculum for Add on courses



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Design and Development of Curriculum for Add on Courses

S.no	Name of Add-on/Certificate programs offered	Dept	Course code	Syllabus Framed By	Type of Add-on Course
1	VIRTUALIZATION	CSE	CS0703	Mr. Dhakshina Moorthy	Self Framed
2	MACHINE LEARNING	CSE	CS0402	Mr. Dhakshina Moorthy	Self Framed
3	DATA SCIENCE	CSE	CS0601	DR. S. Anbu	Self Framed
4	AUTO CADD	CIVIL	---	Mr. KaviArasan	Self Framed
5	ANDROID APP DEVELOPMENT	ECE	ECEVAC21-01	Dr. Sathya Priya	Self Framed
6	ARTIFICIAL INTELLIGENCE AND DATA ANALYTICS	ECE	ECEVAC21-02	Dr. S. Velmurugan	Self Framed
7	PROFESSIONAL SMARTPHONE REPAIR AND MAINTENANCE	ECE	ECEVAC21-03	Dr. S. Velmurugan	Self Framed
8	PRODUCT DESIGN AND DEVELOPMENT USING CATIA	MECH	-----	Mr. M. Vinoth Kumar	Self Framed
9	DESIGN OF EXPERIMENTS	MECH	-----	Dr. Kamal Babu	Self Framed
10	ELECTRICAL DESIGN PROCESS	EEE	EEVAC4701	Mrs. Shanmuga Shankari	Self Framed
11	BASIC ELECTRONICS WITH PCB DESIGNING	EEE	EEVAC2301	Mrs. Shanmuga Shankari	Self Framed
12	ARDUINO WITH IOT	EEE	EEVAC3501	Dr. Arul Doss Adaikalam	Self Framed




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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE – DATA SCIENCE

SELF- FRAMED SYLLABUS

INTRODUCTION:

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

DESCRIBING DATA

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

DESCRIBING RELATIONSHIPS

Correlation –Scatter plots –correlation coefficient for quantitative data –computational formula for correlation coefficient – Regression –regression line –least squares regression line

PYTHON LIBRARIES

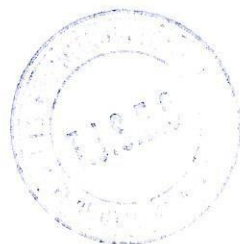
Basics of Numpy arrays –aggregations –computations on arrays –comparisons, masks, boolean logic – fancy indexing – structured arrays – Data manipulation with Pandas –


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
- Use the Python Libraries for Data Wrangling
- Apply visualization Libraries in Python to interpret and explore data




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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSE- Machine learning-CS0403

SYLLABUS

INTRODUCTION:

Introduction to ML- Introduction to ML- Introduction to ML- Reinforcement Learning-
Multivariate Regression- Linear Classification

LEARNING TECHNIQUES :

Unsupervised Learning- Partial Least Squares- Logistic Regression- Supervised Learning-
Shrinkage Methods- Support Vector Machines- Artificial Neural Networks

NETWORKS:

Support Vector Machines- Artificial Neural Networks- Regression Trees- Hinge Loss
Formulation- Training and Validation- Decision Trees

CLUSTERING:

Perceptron Learning- Parameter Estimations- Decision Trees Examples
Clustering- Expectation Maximization- Reinforcement Learning- Birch and Cure Algorithms

MODELS:


Hidden Markov Models- Evaluation Measures- Ensemble Methods- Bayesian Networks-
Ensemble Methods- Variable Elimination- Naive Bayes

COURSE OUTCOMES:

Upon the completion of course, students will be able to

- Understand and outline problems for each type of machine learning
- Design a Decision tree and Random forest for an application
- Implement Probabilistic Discriminative and Generative algorithms for an application and analyze the results.
- Use a tool to implement typical Clustering algorithms for different types of applications.
- Design and implement an HMM for a Sequence Model type of application and identify applications suitable for different types of Machine Learning with suitable justification.




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Department of Computer science and Engineering

VALUE ADDED COURSE

VIRTUALIZATION-SYLLABUS

INTRODUCTION:

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

EMULATION:

Emulation: Basic Interpretation – Threaded Interpretation – Pre-Coded and Direct Interpretation – Binary Translation – Full and Para Virtualization – Types of Hypervisor – Types of Virtualization. Design of Scalable Enterprise Networks

VLANs:

Layer 3 VRF Instances Layer 2 – VFI's Virtual Firewall Contexts Network Device Virtualization – Data path Virtualization Layer 2: 802.1q – Trucking Generic Routing Encapsulation – IPsec L2TPv3 Label Switched Paths – Control-Plane Virtualization – Routing Protocols – VRF-Aware Routing – Multi-Topology Routing.

KERNEL :

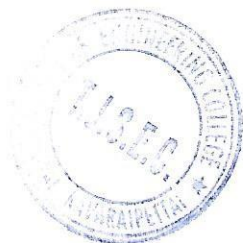
Comparison of Virtualization Technologies: Guest OS, Host OS, Hypervisor, Emulation, Kernel Level – Shared Kernel – Enterprise Solutions: VMware Server, ESXi, Citrix Xen Server, Microsoft Virtual PC, Microsoft Hyper-V,

Virtual Box :

Server Virtualization: Configuring Server with Server Virtualization, Adjusting and Tuning Virtual Servers, VM Backup and Migration – Desktop Virtualization: Terminal Services, Hosted Desktop, Web Based Solutions, Localized Virtualized Desktop – Network and Storage Virtualization: VPN, VLAN, SAN and VSAN, NAS.

COURSE OUTCOME:

1. Analyse 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



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