	Dr. N.G.P. ARTS AND SCIENCE COLLEGE	BoS
	(An Autonomous Institution, Affiliated to Bharathiar University, Coimbatore) Approved by Government of Tamil Nadu and Accredited by NAAC A++ Grade (3rd Cycle- 3.64 CGPA) Dr. N.G.P.-Kalapatti Road, Coimbatore-641048, Tamil Nadu, India Web: www.drngpasc.ac.in |Email: info@drngpasc.ac.in | Phone: +91-422-2369100	09th

Board of Studies Meeting

Department of Computer Science with Cognitive Systems

Date: 09.11.2024, 11.30 am at Center for IoT (C1-Block-101)

Members Present:

S.No.	Name	Category
1.	Dr. A. Nirmala, Professor and Head	Chairman
2.	Dr. E. Chandra, Professor & Head Department of Computer Science Bharathiar University, Coimbatore	University Nominee
3.	Dr. T. Meyyappan, Professor Department of Computer Science Alagappa University, Karaikudi	Subject Expert
4.	Dr. Shantharaja, Professor Department of Software & Systems Engineering Vellore Institute of Technology (VIT), Vellore	Subject Expert
5.	Mr. Ajas Ahmad, Head of Technology Consumer Business Group (CBG) TATA Consultancy Services, Chennai	Industry Expert
6.	Ms. P. Keshika Package App Development Associate Accenture, Coimbatore	Alumni
7.	Dr. N. Kuppuchamy, Associate Professor and Head, Department of Tamil	Co-opted Member
8.	Dr. A. Hazel Verbina, Professor and Head i/c, Department of English	Co-opted Member
9.	Dr. R. Sowrirajan, Assistant Professor and Head, Department of Mathematics	Co-opted Member
10.	Dr. S. Namashivayam, Professor & Head Department of Commerce-BPS	Co-opted Member
11.	Dr. R. Senthil Kumar, Professor	Member
12.	Dr. P. Sakthi Murugan, Assistant Professor	Member
13.	Mrs. M. Sowndharya, Assistant Professor	Member
14.	Dr. A. Mythili, Assistant Professor	Member
15.	Mrs. S. Vishnu Priya, Assistant Professor	Member
16.	Mr. Tamil Selvam, III B.Sc. CSCs	Student Representative

The HoD and Chairman of the Department of Computer Science with Cognitive Systems welcomed and introduced all the members and appreciated them for their continuous support, contribution for the development of academic standard and enrichment of the syllabus.

The items of the agenda were taken one by one for discussion and the following resolutions were passed.

Item 9 .1: *To review and approve the minutes of the previous meeting held on **03.04.2024.***

The chairman of the Board presented the minutes of the previous meeting held on **03.04.2024** and requested the members to approve. After brief discussion the following resolution was passed.

Resolution:

Resolved to approve the minutes of the previous meeting held on 03.04.2024.

Item 9.2: *To consider and approve the syllabi for II semester for the students admitted during the academic year 2024-25*

The chairman of the board presented the detailed scheme and syllabus for the II semester for the students admitted from the academic year 2024-25. The details of changes made also presented as follows.

IDC Offered:

Course Code	Course	Department
24CGU2IM	IDC Practical: Applications of Computers	Catering Science and Hotel Management

After discussion the following resolution was passed.

Resolution:

Resolved to retain the existing syllabus of 2023-26 batch without any modification for the students admitted from the academic year 2024-25.

Item 9.3 : *To consider and approve syllabi for IV semester for the students admitted during the academic year 2023-24.*

The Chairman presented the detailed scheme and syllabus for the IV semester for the students admitted from the academic year 2023-24. The details of changes made are also presented as follows.

Changes Made:

Course Code	Course	Reason
234CG1A4CB	Artificial Intelligence	Dr. T. Meyyappan suggested to include Case studies in Unit V to provide real-world examples and connect theory to practice. Dr. E. Chandra suggested to include modern AI tools in Unit IV to enhance the implementation of AI concepts.
234CG1A4SP	Virtualization Tools	Mr. Ajas Ahmad suggested to include upgraded programs to practice using Workstation Player which integrates VMware, vSphere and vCloud

IDC Offered:

Course Code	Course	Department
234CGIA4IA	Industrial Internet of Things	Commerce - BPS

After discussion the following resolution was passed with the above changes and modifications.

Resolution:

Resolved to retain the existing syllabus of 2022-25 batch with above modifications for the students admitted from the academic year 2023-24.

Item 9.4: *To consider and approve the syllabi for VI semester for the students admitted during the academic year 2022-23.*

The Chairman presented the detailed scheme and syllabus for the VI semester for the students admitted from the academic year 2022-23. The details of changes made are also presented as follows.

Changes Made:

Course Code	Course	Reason
224CG1A6DA	Data Mining	Dr. E. Chandra suggested to include the concepts of text mining and web mining in Unit V to extract valuable insights from unstructured data and web data.

New Courses Introduced:

B.Sc. Computer Science with Cognitive Systems		
Course Code	**Course**	**Reason**
224AI1A6CA	Natural Language Processing	To gain a comprehensive understanding of human language generation techniques, fostering seamless interactions between humans and machines
224CG1A6DB	Cognitive Computing	To impart cognitive design principles, components and business implications to develop cognitive applications
224CG1A6DC	Design and Architecture of Internet of Things	To foster understanding of design of IoT architecture which provides a framework for integration of various smart devices. The board members suggested to change the course title from Internet of Things and its Applications to Design and Architecture of Internet of Things.
224CG1A6DD	Principles of Deep Learning	To equip with the knowledge and skills needed to design, analyze and implement algorithms in deep learning. The board members suggested to change the course title from Deep Learning to Principles of Deep Learning
224CG1A6DF	Human Computer Interaction	To impart the concepts of usability, user experience and user-centered design for developing interactive systems.

Courses Removed:

B.Sc. Computer Science with Cognitive Systems		
Course Code	**Course**	**Reason**
204CG1A6DA	Wireless Networks	Computer Network course had been enriched with basic concepts of Wireless Networks offered in Semester III.
204CG1A6DB	Software Design with UML	The software design concept has been incorporated in Process Management offered in the Semester V.
204CG1A6DC	Mobile Computing	To enhance the focus on Cognitive Computing which is more relevant to the Programme
204CG1A6DE	Devops Application	The core concept of Devops Application has been incorporated in Process Management offered in the Semester V.
204CG1A6DF	Network Security	Design and Architecture of IoT course has been enriched with basic concepts of security

After discussion, the following resolution was passed with the above changes and modifications.

Resolution:

Resolved to approve the above modification and adopt the revised syllabus for the students admitted from the academic year 2022-23.

Item 9.5: *To consider and approve the courses offered by NPTEL that are equivalent to courses offered in curriculum in the III and V Semesters.*

The board discussed the courses offered by NPTEL that are equivalent to the courses offered in curriculum in the III semester for the students admitted for the academic year 2024-25 and V semester for the students admitted for the academic year 2023-24.

Resolution:

Resolved to approve the courses that are equivalent to courses offered by NPTEL in curriculum.

Item 9.6: *To consider and approve the self-study course offered in III semester for the students admitted in UG from academic year 2024-25.*

The board discussed and approve the existing self-study courses offered in III semester for the students admitted in UG from academic year 2024-25.

Resolution:

Resolved to approve the self-study course offered in III semester for the students admitted in UG from academic year 2024-25.

Item 9.7: *To approve the panel of examiners for question paper setting and evaluation of answer scripts for the even semester during the academic year 2024-2025.*

The Chairman presented the panel of examiners for question paper setting, question paper scrutiny and conduct of practical and theory of examination are submitted to CoE for exam related work.

Resolution:

Resolved to approve the panel of examiners for question paper setting and evaluation of answer scripts for the even semester of the academic year 2024-2025.

Item 9.8: To consider and approve any other item brought forward by the Chairman and the members of the board.

No other item was brought forward.

Finally, the Chairman thanked all the members for their cooperation and contribution in enriching the syllabus with active participation in the meeting and sought the same spirit in the future also. The meeting was closed with formal vote of thanks proposed by **Dr. P. Sakthi Murugan,** Assistant Professor.

Date : 09.11.2024

(Dr. A. Nirmala)

Syllabus Revision

Faculty: Computer Science **Board: Cognitive Systems**
Programme: UG **Semester: IV**
Course Code/ Name: 234CG1A4CB- Core: Artificial Intelligence

Unit	Existing	Changes
1	Introduction and Problem-Solving Methods in AI Introduction to AI-Problems and Techniques-State Space Search-Production System-Problem characteristics- Control Strategy-Issues in the design Problem- Search Strategies	
2	Informed and Uninformed Search Strategies Generate-and-Test Method- Hill Climbing Method- Best First Search and A* Search-Constraint Satisfaction Problem: Cryptarithmetic problems	
3	Knowledge Representation Ontologies, Objects and Events- Representation and Mapping-Forward versus Backward Chaining- Slot and Filler Structures - Issues in Knowledge Representation – Developments in Knowledge Representation	
4	Logic in AI Overview – Propositional Logic –First Order Logic – Prolog: Logic Programming—Symbolic Logic—Conversion: English to Prolog—Terminologies—Variables and Operators—Inference Process—Tracing Model of Execution—List Structures—Operations—Drawbacks of Prolog—Applications of Prolog.	Modern Artificial Intelligence Language and Tools: • MATLAB-Introduction, Features, Session, Variables, Vectors and Matrices, Operators, Loops, Strings – MATLAB for Machine Learning.
5	Applications of AI and Expert Systems Game Playing: Minimax Search Procedure – Alpha – Beta Cutoff - Text Analysis and Mining: Text Classification - Information Retrieval – Information Extraction- Expert systems: Introduction – Knowledge Representation – Expert System Shells - Knowledge Acquisition- Applications - Examples	Case Study: Intelligence Biometric Systems, Voice Recognition.

PERCENTAGE OF SYLLABUS REVISED: 38%

COURSE FOCUSES ON:

✓	Skill Development	☐	Entrepreneurial Development
✓	Employability	☐	Innovations
☐	Intellectual Property Rights	☐	Gender Sensitization
☐	Social Awareness/ Environment	☐	Constitutional Rights/ Human Values/ Ethics

Syllabus Revision

Faculty: Computer Science
Programme: UG
Board: Cognitive Systems
Semester: IV
Course Code/ Name: 234CG1A4SP – SEC-Practical: Virtualization Tools

S.No	Contents
1	Installing and Using Workstation Player
2	Changing Workstation Player Preference Settings
3	Creating Virtual Machines in Workstation Player
4	Installing and Upgrading VMware Tools
5	Starting and Stopping Virtual Machines in Workstation Player
6	Changing the Virtual Machine Display
7	Configuring and Managing Virtual Machines
8	Configuring and Managing Devices
9	Configuring Network Connection
10	Configuring Virtual Machine Option Setting

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON: Skill Development

Syllabus Revision

Faculty: Computer Science
Programme: UG
Course Code/ Name: 224CG1A6DA-**DSE: Data Mining**

Board: Cognitive Systems
Semester: VI

Unit	Existing	Changes
1	Introduction Data mining - Functionalities - Classification - Introduction to Data Warehousing - Data Pre-processing: Pre-processing the Data - Data cleaning - Data Integration and Transformation - Data Reduction	
2	Data Mining, Primitives, Languages and System Architecture Data Mining - Primitives - Data Mining Query Language, Architecture of Data mining Systems. Concept Description, Characterization and Comparison: Concept Description, Data Generalization and Summarization, Analytical Characterization, Mining Class Comparison – Statistical Measures	.
3	Mining Association Rules Basic Concepts - Single Dimensional Boolean Association Rules from Transaction Databases, Multilevel Association Rules from transaction databases - Multi dimension Association Rules from Relational Database and Data Warehouses	
4	Classification and Prediction Introduction - Issues - Decision Tree Induction - Bayesian Classification - Classification of Back Propagation. Classification based on Concepts from Association Rule Mining - Other Methods. Prediction - Introduction - Classifier Accuracy	
5	Cluster Analysis Introduction - Types of Data in Cluster Analysis, Petitioning Methods - Hierarchical Methods-Density Based Methods - GRID Based Method - Model based Clustering Method	Introduction to Web Mining and Text Mining Web Mining: Web Search Engines and Web Mining, Implementing Web Mining, Web Structure Mining-PageRank Algorithm-Web Query Mining- Text Mining: Introduction, Text Mining Workflow, Term-by-Document Matrix - Text Classification, Metrics, Application

PERCENTAGE OF SYLLABUS REVISED: 26%

COURSE FOCUSES ON:

✓	Skill Development	☐	Entrepreneurial Development
✓	Employability	☐	Innovations
☐	Intellectual Property Rights	☐	Gender Sensitization
☐	Social Awareness/ Environment	☐	Constitutional Rights/ Human Values/ Ethics

Syllabus Revision

Faculty: Computer Science
Programme: UG
Course Code/ Name: 224AI1A6CA - Core: Natural Language Processing

Board: Cognitive Systems
Semester: VI

Unit	Course Contents
I	Language Processing Computing with Language: Introduction - Texts and Words, Texts as Lists of Words, Statistics, Automatic Natural Language Understanding - Accessing Text Corpora - Lexical Resources - WordNet
II	Text Processing and Structured Programs Accessing Text from the Web and Disk – Strings - Text Processing with Unicode- Regular Expressions and its Applications- Normalizing Text – Segmentation - Formatting Lists – Sequences - Functions - Program Development
III	Tagging and Classification Introduction - Tagger - Tagged Corpora, Mapping Words to Properties, Automatic Tagging, N-Gram Tagging, Transformation based Tagging - Learning to Classify Text: Supervised Classification - Examples.
IV	Information Extraction Introduction - Chunking - Developing and Evaluating Chunkers - Recursion in Linguistic Structure - Named Entity Recognition - Relation extraction - Analyzing Sentence Structure: Grammatical Dilemmas, Use of Syntax, Context-Free Grammar, Parsing.
V	Managing Linguistic Data Natural Language Understanding - Propositional Logic - First Order Logic - Semantics of English Sentences - Discourse Semantics - Corpus Structure - Corpus Life cycle - Acquiring Data - Working with XML - Working with Toolbox Data.

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development	☐	Entrepreneurial Development
✓	Employability	☐	Innovations
☐	Intellectual Property Rights	☐	Gender Sensitization
☐	Social Awareness/ Environment	☐	Constitutional Rights/ Human Values/ Ethics

Syllabus Revision

Faculty: Computer Science
Programme: UG
Course Code/ Name: 224CG1A6DB - **DSE:** Cognitive Computing

Board: Cognitive Systems
Semester: VI

Unit	Course Contents
I	Foundation of Cognitive Computing Cognitive Computing as a New Generation- Cognitive Systems, uses, need-Gaining Insights from Data: Domains of Cognitive Computing - Foundation of Cognitive Computing-Understanding Cognition-Two Systems of Judgment and Choice-Understanding Complex Relationships Between Systems: Types of Adaptive Systems-The Elements of a Cognitive System.
II	Design Principles for Cognitive Systems Components of a Cognitive Systems -Bringing Data into the Cognitive System: Leveraging Internal and External Data Sources, Data Access and Feature Extraction Services, Analytics Services-Machine Learning-Hypotheses Generation and Scoring-Presentation and Visualization Services: Infrastructure.
III	Business Implications of Cognitive Computing Advantages of New Disruptive Models, Difference with a Cognitive Systems Approach, Meshing Data, Business Knowledge to Plan for the Future, Building Business Specific Solutions, Cognitive Application.
IV	Advanced Analytics to Cognitive Computing Advanced Analytics: Introduction, Key Capabilities -Predictive Analytics: Business Value of Predictive Analytics-Text Analytics: Business Value of Text Analytics-Image Analytics-Speech Analytics- Advanced Analytics to Create Value
V	The Process of Building a Cognitive Application Cognitive Platform, Objective, Domain, Intended Users and Attributes, Questions and Exploring Insights-Creating and Refining the Corpora: Preparing the Data, Ingesting the Data, Refining and Expanding the Corpora, Governance of Data, Training and Testing

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development	☐	Entrepreneurial Development
✓	Employability	☐	Innovations
☐	Intellectual Property Rights	☐	Gender Sensitization
☐	Social Awareness/ Environment	☐	Constitutional Rights/ Human Values/ Ethics

Syllabus Revision

Faculty: Computer Science
Programme: UG
Board: Cognitive Systems
Semester: VI
Course Code/ Name: 224CG1A6DC - DSE: Design and Architecture of Internet of Things

Unit	Course Contents
I	Internet of Things Evolution - Enabling Technologies - M2M Communication - IoT World Forum (IoTWF) standardized architecture - Internet of Things (IoT) Architecture - Functional Stack – Fog - Edge and Cloud in IoT - Functional blocks of an IoT ecosystem : Sensors, Actuators, Smart Objects.
II	Protocols IoT Access Technologies: Physical Layer - MAC layer - Topology – Security - IEEE 802.15.4 - 802.11a – LoraWAN - Network Layer: IP versions - Constrained Nodes - Constrained Networks - 6LoWPAN - Application - Transport Methods: SCADA - Application Layer Protocols: CoAP, MQTT.
III	Design Methodology - Embedded computing logic – Microcontroller - System on Chips - Building blocks of IoT : Overview - Hardware platforms: Raspberry pi, Arduino Board
IV	Data Analytics and Supporting Services Structured Versus Unstructured Data - Data in Motion versus Data at Rest – Challenges - Data Acquiring - Organizing in IoT/M2M - Supporting Services: Computing Using a Cloud Platform for IoT/M2M Applications – Services - Everything as a service and Cloud Service Models.
V	Applications Home automations, Infrastructures, Buildings, Security, Industries, IoT electronic equipment's, Industry 4.0 concepts.

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development	☐ Entrepreneurial Development
✓	Employability	☐ Innovations
☐	Intellectual Property Rights	☐ Gender Sensitization
☐	Social Awareness/ Environment	☐ Constitutional Rights/ Human Values/ Ethics

Syllabus Revision

Faculty: Computer Science
Programme: UG
Course Code/ Name: 224CG1A6DD - **DSE:** Principles of Deep Learning

Board: Cognitive Systems
Semester: VI

Unit	Course Contents
I	Fundamentals of Neural Networks Introduction - Understanding the Biological Neuron - Exploring the Artificial Neuron - Early Implementation of ANN - Types of Activation Functions - Architectures of Neural Networks - Learning Process in ANN - Deep Neural Network
II	Convolutional Neural Networks Building Blocks - Typical Convolutional Neural Network (CNN) - CNN Architectures: LeNet-5, AlexNet, VGG-16, ResNet - Object Detection - Transfer Learning - Pre-processing Tasks in Computer Vision
III	Sequence-based Models Sequence Data - Recurrent Neural Network (RNN): Data Preparation, Vanishing Gradient Problem and RNN - Long Short-Term Memory - Gated Recurrent Units - Bi-directional Models, Language Modelling and Sequence Models
IV	Deep Learning Architecture Encoder - Decoder Architecture - Attention Mechanism -Transformer Architecture: Multi-Headed Attention, Transformer Modes - Generative Adversarial Networks (GAN): Examples, Basic concepts, DCGAN, StyleGAN, BiGAN, Applications.
V	Reinforcement Learning Introduction - OpenAI Gym - Deep Q-Networks - Deep Deterministic Policy Gradient – Case Studies: Disease Detection from X-ray images - Recognizing Cats with very deep Convolutional Neural Networks - Classification of Horses and Humans using Transfer Learning

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development		Entrepreneurial Development
✓	Employability		Innovations
	Intellectual Property Rights		Gender Sensitization
	Social Awareness/ Environment		Constitutional Rights/ Human Values/ Ethics

Faculty: Computer Science
Programme: UG
Course Code/ Name: 224CG1A6DF – DSE: Human Computer Interaction

Board: Cognitive Systems
Semester: VI

Unit	Course Contents
I	**Foundation of Human Computer Interaction** Context of Interaction - Designing Interactive systems –Users cognition and cognitive frameworks - conceptualizing interaction-Principles, Theories - User Interface: Definition, Importance of good design, Benefits-Human - Centered Development, Evaluation-Human Performance models.
II	**Interaction Styles** Graphical User Interface (GUI): Popularity of graphics - direct manipulation - Graphical System -Characteristics - Web user - Characteristics, Principles of User Interface - Interaction styles - Expressive Human, Command Languages - Information search- Data Visualization Design process: Human Interaction with computers, Characteristics - Human Consideration - Human Interaction Speeds and Business Junctions.
III	**Evaluation of Interaction** Evaluation Techniques: Assessing user experience - Usability testing – Heuristic evaluation and walkthroughs - analytics predictive models - Cognitive models - Socio-organizational issues and stakeholder requirements - Communication and collaboration models
IV	**Models and Theories** Task analysis - Dialog notations and design - Models of the system - Modeling rich interaction - Ubiquitous computing
V	**Web and Mobile Interaction** Hypertext – Multimedia - Designing for the web -Direct Selection- Contextual Tools-Overlays-Inlays and Virtual Pages- Process Flow- Transitions: Lookup Patterns, Feedback Patterns- Mobile Apps: Mobile navigation, content and control idioms, Multi-touch gestures, Inter - app integration, Mobile web

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development	☐	Entrepreneurial Development
✓	Employability	☐	Innovations
☐	Intellectual Property Rights	☐	Gender Sensitization
☐	Social Awareness/ Environment	☐	Constitutional Rights/ Human Values/ Ethics

Dr. N.G.P. ARTS AND SCIENCE COLLEGE

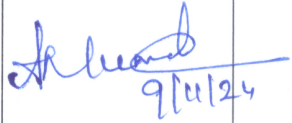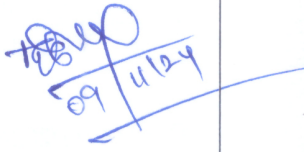## ATTENDANCE OF THE NINTH BOARD OF STUDIES MEETING

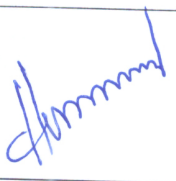**Faculty: Computer Science**   **Board: Computer Science with Cognitive Systems**

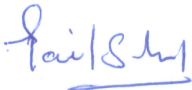Date : 09.11.2024
Time : 11.00 a.m.   **Venue: IoT Lab (Google Meet)**
The following members were present for the meeting

S.No	Name	Designation	Signature
1.	**Dr.A.Nirmala** Professor & Head Department of Computer Science with Cognitive Systems Dr. N.G.P Arts and Science College Coimbatore - 48.	Chairman	*signed* 9/11/24
2.	**Dr.E.Chandra** Professor & Head Department of Computer Science Bharathiar University Coimbatore-46	VC Nominee	PRESENT
3.	**Dr. S.P. Shantharajah** Professor & Head Department of Software & Systems Engineering School of Information Technology & Engineering Vellore Institute of Technology (VIT) Vellore-632 014	Subject Expert	PRESENT
4.	**Dr. T. Meyyappan** Professor Department of Computer Science Alagappa University Karaikudi-630 003	Subject Expert	PRESENT
5.	**Mr. Ajas Ahmad,** Head of Technology Consumer Business Group(CBG) TATA Consultancy Services Chennai-600 058	Industry Expert	PRESENT
6.	**Ms. P. Keshika** Package App Development Associate Accenture Coimbatore-641 014	Alumni	*signed*
7.	**Dr.N.Kuppuchamy** Associate Professor & Head Department of Tamil Dr.N.G.P. Arts and Science College Coimbatore	Co-opted Member	*signed* 09/11/24

8.	**Dr.A.Hazel Verbina** Professor & Head Department of English Dr.N.G.P. Arts and Science College Coimbatore	Co-opted Member	
9.	**Dr. R. Sowrirajan** Assistant Professor & Head Department of Mathematics Dr.N.G.P. Arts and Science College Coimbatore	Co-opted Member	
10.	Dr. S. Namasivayam Professor & Head Department of Commerce-BPS Dr.N.G.P. Arts and Science College Coimbatore	Co-opted Member	
11.	**Dr. R. Senthil Kumar** Professor Department of Computer Science with Cognitive Systems Dr.N.G.P. Arts and Science College Coimbatore	Internal Member	
12.	**Dr. P. Sakthi Murugan** Assistant Professor Department of Computer Science with Cognitive Systems Dr.N.G.P. Arts and Science College Coimbatore	Internal Member	
13.	**Mrs. M Sowndharya** Assistant Professor Department of Computer Science with Cognitive Systems Dr.N.G.P. Arts and Science College Coimbatore	Internal Member	
14.	**Dr. A. Mythili** Assistant Professor Department of Computer Science with Cognitive Systems Dr.N.G.P. Arts and Science College Coimbatore	Internal Member	
15.	**Mrs. S. Vishnu Priya** Assistant Professor Department of Computer Science with Cognitive Systems Dr.N.G.P. Arts and Science College Coimbatore	Internal Member	
16.	**Mr. S. Tamil Selvam** III B.Sc. CSCs Department of Computer Science with Cognitive Systems Dr.N.G.P. Arts and Science College Coimbatore	Student Representative	

- Virtual Meeting- Signature not required

Date: 09/11/2024

(Dr.A.Nirmala)
Head of the Department
Bos Chairman / HoD
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