MINUTES OF THE FIFTH BOARD OF STUDIES MEETING

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

The Meeting of Board of Studies (BoS) was held as given below:

Name of the Body	**Board of Studies (BoS)**
Department	**Cognitive Systems**
Meeting No.	**5**
Date and Time	**03.12.2022 @ 11.00 a.m.**
Venue	**Google Meet(pvo-zryw-pdd)**
Members Attended	**The details are given in the ANNEXURE -I**

Item	AGENDA
01	Discussion on syllabi for Part III - Core Courses for second semester UG - 2022-23 Batch and onwards
02	Discussion on syllabus for Part III- Inter Disciplinary Course (IDC) offered by Mathematics department
03	Discussion on syllabus for Part III- Inter Disciplinary Course (IDC) offered to Catering Science and Hotel Management department
04	Discussion on Part I (Tamil/Hindi/French/Malayalam) offered by Language department for II Semester UG for 2022-23 Batch and onwards
05	Discussion on Part II (English) offered by English Department for II Semester UG for 2022-23 Batch and onwards
06	Discussion on Part IV (AECC) Basic Tamil/Advance Tamil/Human Rights and Women's Rights for II Semester UGfor 2022-23 Batch and onwards
07	Discussion on credits to Part V Extension Activity for II Semester UG 2022-23 Batch and onwards
08	Any other matters

MINUTES OF THE FIFTHBOARD OF STUDIES MEETING

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

The Chairman of BoS welcomed all the panel members for the meeting. The items listed in the agenda were taken for discussion.

The following are the minutes of the meeting:

Item - 01	Discussion on Syllabus for Part III – Core Courses for II Semester UG 2022-23 Batch and onwards
Discussion	**224CA1A2CA:Data Structures** • The unified syllabus approved in the "Computer Applications"Board of Studies was placed for endorsement **224CG1A2CA:Operating Systems (New Course)** • Process management, Storage management, Memory management and Linux Operating system concepts were included **224CG1A2CP:Operating Systems** • **Mr.A.Sankaranarayanan** suggested to include the program based on Linux Operating Systems
Resolution	The Board approved the syllabi for the above courses
Item - 02	**Discussion on syllabus for Part III - Inter Disciplinary Course (IDC) offered by Department of Mathematics**
Discussion	**222MT1A2IC–Discrete Mathematics** • Syllabus approved by the Mathematics BoS
Resolution	The Board approved the syllabus
Item -03	**Discussion on Syllabus for Part III- Inter Disciplinary Course(IDC) offered to Catering Science and Hotel Management for 2022-23 Batch and onwards**
Discussion	**224CG1A2IA-Applications of Computers (New Course)** • The Board members suggested to include the fundamentals of computers and the office automation tools like Word, Excel, PowerPoint and Access.
Resolution	The Board approved the syllabus
Item -04	**Discussion on Part I (Tamil/Hindi/French/Malayalam) offered by Language department for II Semester UG for 2022-23 Batch and onwards**
Discussion	**221TL1A2TA - Tamil-II:AraIlakkiyam** • The unified syllabus approved by the Board of Studies in Languages was placed for endorsement. **221TL1A2HA - Hindi-II -Modern Literature** • The unified syllabus approved by the Board of Studies in Languages was placed for endorsement. **221TL1A2FA-French-II-Grammar, Translation And Civilization** • The unified syllabus approved by the Board of Studies in Languages was placed for endorsement.

Cont …

	• The unified syllabus approved by the Board of Studies in Languages was placed for endorsement. **221TL1A2FA-French-II-Grammar, Translation And Civilization** • The unified syllabus approved by the Board of Studies in Languages was placed for endorsement. **221TL1A2MA - Malayalam – II -Modern Literature** • The unified syllabus approved by the Board of Studies in Languages was placed for endorsement.
Resolution	The Board unanimously approved the syllabi
Item -05	**Discussion on Part II (English) offered by English Department for II Semester UG for 2022-23 Batch and onwards**
Discussion	**221EL1A2EA :Part II: Professional English II** • The unified syllabus approved by the Board of Studies in English was placed for endorsement
Resolution	The Board approved the same
Item -06	**Discussion on Part IV (AECC) Basic Tamil/Advanced Tamil/Human Rights and Women's Rights for II Semester UG for 2022-23 Batch and onwards**
Discussion	**221TL1A2AA :Basic Tamil** • The unified syllabus approved by the Board of Studies in Languages was placed for endorsement. **221TL1A2AB: Advanced Tamil** • The unified syllabus approved by the Board of Studies in Languages was placed for endorsement. **225CR1A2AA:Human Rights and Women's Rights** • The unified syllabus was approved by the Board of Studies in Commerce with Corporate Secretaryship was placed for endorsement.
Resolution	The Board approved the syllabi of above courses
Item-07	**Discussion on credits to Part V Extension Activity for II Semester UG 2022-23 Batch and onwards**
Discussion	• One credit to be awarded for participation in YRC/RCC//NSS/ RRC/Yoga/Sports/Clubs
Resolution	The Board approved awarding one credit for extension activity
Item -08	**Any other matters**
Discussion	The board members discussed and recommended the Panel of Examiners
Resolution	The Board approved the same

The Chairman of Board of Studies (BoS) thanked all the members for their active participation and providing their valuable suggestions.

Date: 03.12.2022

(Dr. A.Nirmala)
Bos Chairman / HoD
Dept. of Computer Science with Cognitive Systems
Dr. N. G. P. Arts and Science College
Coimbatore - 641 048

Syllabus Revision

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

Semester: II

Course Code / Name: 224CA1A2CA/ Data Structures

Unit	Course Content
I	**Introduction**: Basic Terminology -Classification of Data Structures -Operations on Data Structures-Abstract Data Type-Algorithms-Time and Space Complexity -Big O Notation-Omega Notation (Ω) -Theta Notation (Φ). **Arrays:** Declaration of Arrays-Accessing the elements of an array-Storing values in Arrays-Operations on Arrays. Applications of Arrays: Sparse Matrices
II	**Stacks:** Array Representation of Stacks- Operations on a Stack-Linked Representation of Stacks - Applications of Stacks: Evaluation of Arithmetic Expression –Recursion. **Queues:** Array Representation of Queues - Operations on Queues -Linked Representation of Queues - Circular Queues -Applications of Queues: JOB Scheduling
III	**Singly Linked Lists**: Inserting a node in a Linked List- Deleting a node from a Linked List. **Circular Linked Lists:** Inserting a node in a Circular Linked List - Deleting a node from a Circular Linked List. **Doubly Linked Lists:** Inserting a node in a Doubly Linked List - Deleting a node from a Doubly Linked List. Applications of Linked Lists: Polynomial Addition
IV	**Trees:** Binary Trees – Representation of Binary Trees -Creating a Binary Tree - Traversing a Binary Tree-Binary Search Tree and its Operations - Threaded Binary Trees. Applications of Tree: Expression Trees. **Graphs:** Graph Terminology - Representation of Graphs - Graph Traversal Algorithms -Applications of Graphs: Shortest Path Algorithm - Dijkstra's Algorithm -Minimum Spanning Trees - Prim's Algorithm
V	**Searching**: Linear search –Binary Search. **Sorting**: Bubble Sort - Insertion Sort - Selection Sort – Quick Sort-Merge Sort -Heap Sort. **Hashing and Collision**: Hash Tables - Hash Functions - Collision. Applications of Hashing: Keyword Table in a Compiler

PERCENTAGE OF SYLLABUS REVISED: 36 %

COURSE FOCUSES ON:

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

Syllabus Revision - New Course

Faculty: Computer Science **Board: Cognitive Systems**
Semester: II

Course Code / Name: 224CG1A2CA/ Operating Systems

Unit	Course Content
I	**Introduction to Operating Systems**: Computer Basics: Definition of a Computer - Characteristics and Applications of Computers – Block Diagram of a Digital Computer – Classification of Computers based on size and working. Hardware Basics: Central Processing Unit – I/O Devices-Memory Devices- Secondary storage devices. Operating System Basics: OS Definition, Functions, OS as a Resource Manager, Types of OS, Evolution of OS, Operating System Operations, Operating System Services, User Operating System Interface, System Calls, Types of System Calls.
II	**Process Management**: Basic Concepts, Process Scheduling, Operations on Processes, Inter-process Communication, Scheduling Criteria, Scheduling Algorithms, Multiple Processor Scheduling
III	**Memory Management:** Memory Management Strategies, Swapping, Contiguous Memory Allocation, Paging, Segmentation, Virtual Memory Management, Demand Paging, Page Replacement Techniques and Algorithms
IV	**Storage Management:** File Concept, Access Methods, Directory Structure, Protection, Implementing File Systems, File System Structure, Directory Implementation, Allocation Methods, Free Space Management, Efficiency and Performance, Recovery
V	**Operating Systems Installation:** Introduction to Linux: Versions, Components, Features; Installation of Linux OS, Managing Directories, Managing Files. Introduction to Windows: Versions, GUI Components, Features; Installation of Client OS and Server OS, Installation of Roles and Features, Managing Users and Groups, Managing Devices and Printers, Storage Management, Managing and Monitoring of Server, Backup & Restoration

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 **Board: Cognitive Systems**

Course Code / Name: 224CG1A2CP/ Operating Systems **Semester: II**

S.No.	Existing	Changes
1	Installation of client Windows10 OS in Virtual machine	Explain the steps to Install the Windows Client OS
2	Installation of Windows server 2019 R2OS in Virtual machine	
3	Add roles and features in Windows Server 2019 R2	
4	~~Disk Partitioning in MBR and GPT~~.	Demonstrate the usage of Devices and Printers
5	Demonstrate - Server Backup Operation.	
6	Configuring Active Directory Domain Service	
7	~~Configuring, managing and installation of DNS~~.	
8	~~Configuring, managing and installation of DHCP~~	Demonstrate how to Install Roles and Features
9	IIS configuration and deployment in Windows Server 2019 R2.	
10	Mapping network drive in Windows Server 2019 R2	
11	~~Configure User and Device Claim Types~~	
12	Create and Configure Resource Properties and Lists.	Explain the steps to Install the Linux OS.

PERCENTAGE OF SYLLABUS REVISED: 33 %

COURSE FOCUSES ON:

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

Syllabus Revision – New Course

Faculty: Computer Science

Board: Cognitive Systems

Semester: II

Course Code/ Name: 222MT1A2IC / Discrete Mathematics

Unit	Course Content
I	Introduction - set and its elements - set description - types - Venn-Euler Diagrams - set operations and laws of set theory - fundamental products - index and indexed sets - partitions of sets - minsets - countable and uncountable sets - Algebra of sets and duality - computer representation - the inclusion and exclusion principle- Fuzzy sets
II	Relations: Introduction - cartesian product of sets - binary relations – set operations on relations - types– partial order relations – equivalence relation and classes-Functions: Introduction - types – invertible functions - composition of functions.
III	Introduction - propositional calculus – basic logical operations - statements generated by a set - conditional statements -converse, inverse and contrapositive statements - biconditional - tautologies - contradiction - contingency - argument - methods of proof - equivalence and implication - predicate calculus-quantifiers
IV	Introduction - paths, cycles and connectivity - subgraphs - types - isomorphic and homeomorphic graphs - representation of graphs in computer memory- Eulerian and Hamiltonion graphs-cartesian product-shortest path. Trees: Introduction - binary trees - complete binary tree - tree of an Algebraic expression - traversing binary trees.
V	Introduction - language: the set theory of strings - languages – regular expressions and regular languages – grammar – finite state machine – finite state automata.

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 – New Course

Faculty: Computer Science **Board: Cognitive Systems**
Semester: II

Course Code / Name: 224CG1A2IP / Applications of Computers

Unit	Course Content
I	Introduction to Computers: Characteristics, History, Generations, Classifications, Applications - Hardware and Software, Operating Systems, Computer Languages. Office tools: Introduction- Word, Excel, Power Point, Access. Managing Document Files-Saving Document file, Opening Document File, Creating New Document file, Printing Document File, Controlling Page Setup in Office Programs, Closing and Quitting the Document.
II	Introduction to Word: Editing a Document, Move and Copy Text, Formatting Text and Paragraph, Finding and Replacing Text, All about Borders, Shading and Color, Wrapping a Text around Graphics and Text Boxes, Arranging Text in Newspaper-Style Columns. Working with Table: Creating Table, Entering and Editing Table Data, Formatting a Table, Mail Merge.
III	Excel basics: Entering Data into cells, Editing and Erasing Data, Working with Ranges, Excel Formulas and Functions- Formula Basics, Using Functions. Inserting and Deleting rows and columns, Graphically representing data: Charts and Graphs-Picking a Chart Type, Reviewing the Chart Type , Printing and Saving Charts, Customizing Charts: Adding and Editing Titles, Legends, and Data Labels.
IV	PowerPoint: Creating a PowerPoint Presentation: Creating, Viewing, Inserting, Deleting, Rearranging and Copying Slides, Entering and Formatting the Text. Animated Slide Presentation, Including Graphs, Charts, Tables and Columns in slides, Getting Fancy with Sound and Video, Showing a Presentation-Giving a presentation, Printing a presentation, Using slide Transitions.
V	Access: Creating a Database, Opening a Database, ways of viewing a Table, Designing and Refining a Database Table-Creating, Moving, Copying, Deleting and Renaming Fields, Finding and Replacing Data in Database Table, Filtering to Find Data.

List of Practical

S.No.	Contents
	WORD PROCESSING
1	Text manipulation, changing the font size, font type, and font style, making the text bold, underlining the text, aligning the text (Centre, justify, left, right), cut, copy, paste.
2	Paragraph indenting and spacing, bullets and numbering, spelling and Grammar check, inserting a picture from clip art, auto shapes, and word art.
3	Table manipulation- creating tables, inserting, deleting rows and columns, changing width, height and table borders.
4	Mail merge concept, printing formats.
	EXCEL
5	Entering the data, changing the fonts, changing row heights and column width, formatting the data, sorting the data.
6	Formula processing- creating simple formula, using functions (ABS, SQRT, LEN, SUM, ROUND, AVG, COUNT, CONCATENATE, FIND)
7	Inserting and formatting charts, inserting pictures, printing formats.

POWER POINT

8	Creating simple presentations, saving, opening and existing presentation, creating a presentation using Auto content wizard and template.
9	Using various auto- layouts, charts, table, bullets and clip art.
10	Viewing an existing document in various views-outline view, slide view, slide show view, slide sorter view and note pages view
11	Create a database using Access
12	Generate a Report

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

ATTENDANCE OF THE FIFTH BOARD OF STUDIES MEETING

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

Date : 03.12.2022
Time : 11.00 a.m. Venue: Google Meet
The following members were present for the meeting

S.No	Name	Designation	Signature
1.	**Dr.A.Nirmala** Professor & Head i/c Department of Computer Science with Cognitive Systems Dr.N.G.P Arts and Science College Coimbatore - 48.	Chairman	3/12/22.
2.	**Dr.E.Chandra** Professor & Head Department of Computer Science Bharathiar University Coimbatore-46	VC Nominee	Absent
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.A.Sankaranarayanan** Assistant system Consultant TATA Consultancy Services Chennai-600 058	Industry Expert	Present
6.	**Dr.N.Kuppuchamy** Associate Professor & Head Department of Tamil Dr.N.G.P. Arts and Science College Coimbatore	Co-opted Member	3/12/22
7.	**Dr.R.VithyaPrabha** Professor & Head Department of English Dr.N.G.P. Arts and Science College Coimbatore	Co-opted Member	3/12/22

8.	**Dr. R. Sowrirajan** Assistant Professor & Head Department of Mathematics Dr.N.G.P. Arts and Science College Coimbatore	Co-opted Member	
9.	**Dr. R. Senthil Kumar** Professor Department of Computer Science with Cognitive Systems Dr.N.G.P. Arts and Science College Coimbatore	Internal Member	3/12/2022
10.	**Mr. P. Sakthi Murugan** Associate Professor Department of Computer Science with Cognitive Systems Dr.N.G.P. Arts and Science College Coimbatore	Internal Member	3/12/22
11.	**Ms.K.Rindhiya** III B.Sc. CSCs Department of Computer Science with Cognitive Systems Dr.N.G.P. Arts and Science College Coimbatore	Student Representative	03/12/2022

- Virtual meeting – Signature not required

3/12/22.

(Dr.A.Nirmala)

Bos Chairman / HoD
Dept. of Computer Science with Cognitive Systems
Dr. N. G. P. Arts and Science College
Coimbatore - 641 048

Date: 03/12/2022

Academic Council
Dr.V. Rajendran
CHAIRMAN
Dr.N.G.P. Arts and Science College