PRAGATI ENGINEERING COLLEGE
(AUTONOMOUS)
DEPARTMENT OF INFORMATION TECHNOLOGY

Date: 5-7-2022

Innovations in Teaching and Learning for the A.Y. 2021-22

➢ **Mind Maps**

Think-pair-share is a collaborative learning strategy where students work together to solve a problem or answer a question about an assigned reading. This strategy requires students to think individually about a topic or answer to a question and share ideas with classmates.

S.No.	Faculty	Course	Topic
A.Y. 2021-22			
1	Mrs. T Ganga Bhavani	Computer Networks	Multiplexing Concepts

➢ **Problem based learning**

Problem based learning is a student centred pedagogy in which students learn about a subject through the experience of solving an open-ended problem found in trigger material.

S.No.	Faculty	Course	Topic
A.Y. 2021-22			
1	Dr. D Sirisha	Design and Analysis of Algorithms	LC-Travelling Salesman Problem
2	Dr. D Sirisha	Design and Analysis of Algorithms	LC-0/1 Knapsack Problem
3	Mr. G Satya Mohan Chowdary	Data Warehousing and Data Mining	Apriori Algorithm
4	Mr. G Satya Mohan Chowdary	Data Warehousing and Data Mining	K-Means Algorithm
5	Mr. G Satya Mohan Chowdary	Mobile Computing	AODV Algorithm
6	Mr. G Satya Mohan Chowdary	Mobile Computing	DSDV Algorithm
7	Mr. K V V S Trinadh Naidu	Web Application Development through J2EE	CollableStatement

➢ **One minute paper**

A one-minute paper may be defined as a very short, in-class writing activity (taking one-minute or less to complete) in response to an instructor-posed question, which prompts students to reflect on the day's lesson and provides the instructor with useful feedback.

S.No.	Faculty	Course	Topic
A.Y. 2021-22			
1	Dr. D Sirisha	Design and Analysis of Algorithms	Worst Case Analysis of Quick Sort
2	Mrs. N V S Sowjanya	Human Computer Interaction	Graphical User Interface
3	Mrs. N V S Sowjanya	Human Computer Interaction	Section Controls
4	Mrs. N V S Sowjanya	Software Testing	Software Testing Life Cycle
5	Mrs. T Ganga Bhavani	Computer Networks	Connection Establishment
6	Mr. Ch Venkata Ramana	Information Retrieval System	Thesaurus Construction
7	Mrs. N V S Sowjanya	Data Science	Sorting & Unique
8	Mrs. N V S Sowjanya	Data Science	Ranking
9	Mr. G Satya Mohan Chowdary	Cryptography and Network Security	Principles of Public Key Cryptosystems
10	Mr. G Satya Mohan Chowdary	Cryptography and Network Security	S/MIME
11	Mr. G Satya Mohan Chowdary	Automata Theory and Compiler Design	Syntax Directed Translation
12	Mr. G Satya Mohan Chowdary	Automata Theory and Compiler Design	Type Conversions
13	Mrs. T Ganga Bhavani	Mobile Computing	GSM Architecture
14	Mrs. T Ganga Bhavani	Mobile Computing	Wireless LAN Security
15	Mrs. T Ganga Bhavani	Cyber Security	Classification of Cyber Crimes
16	Mr. K V V S Trinadh Naidu	Java Programming	Method Overloading

➢ **Think Pair Share**

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S.No.	Faculty	Course	Topic
A.Y. 2021-22			
1	Dr. D Sirisha	Design and Analysis of Algorithms	Time Complexity of Recursive Algorithms
2	Dr. D Sirisha	Design and Analysis of Algorithms	Minimal Cost Spanning Tree- Prims Method
3	Dr. D Sirisha	Design and Analysis of Algorithms	Minimal Cost Spanning Tree- Kruskals Method
4	Mr. K V V S Trinadh Naidu	Web Application Development through J2EE	JSP: Page Directives
5	Mrs. N V S Sowjanya	Data Science	Removing Duplicates
6	Mrs. T Ganga Bhavani	Cyber Security	Trends in Mobility
7	Mr. K V V S Trinadh Naidu	Java Programming	Multi-Catch Classes

➢ **Flipped Classroom**

   A flipped classroom is an instructional strategy and a type of blended learning that reverses the traditional learning environment by delivering instructional content, often online, outside of the classroom. It makes activities, including those that may have traditionally been considered homework, into the classroom. It develops self-learning capabilities in students.

S.No.	Faculty	Course	Topic
A.Y. 2021-22			
1	Dr. D Sirisha	Design and Analysis of Algorithms	0/1 Knapsack Problem

Faculty In-Charge   **HoD – IT**