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A FRANSALIAN INSTITUTE OF HIGHER LEARNING

"RESEARCH AND DEVELOPMENT IN DISCRETE MATHEMATICS"

DEPARTMENT OF MATHEMATICS

RESOURCE PERSON:
Dr. C Manjula Ph.D and
U.Mohan Chand

Venue: SEMINAR HALL
Date: 03:01:2020 to 04:01:2020

Report on a Two Day Workshop on research and development in discrete Mathematics.

Title	Two Day Workshop on research and development in discrete Mathematics
Date of Event(s)	03/01/2020 to 04/01/2020
Department / Association	MATHEMATICS
Venue	SEMINAR HALL
Number of Participants	23

Resource Person(s) with qualification	Dr..C Manjula Ph.D and U. Mohan Chand
Books (if published)	NA

Place of visit/ details of Industrial visit place (if applicable):	NA

Report:

The Department of Mathematics, SFS COLLEGE Bengaluru organized a Two day workshop on research and development in discrete mathematics On 03/01/2020 to 04/01/2020.The participants are Students including faculty members, research scholars. .

The workshop began with an inaugural function on 03/01/2020 The function was graced by Principal SFS College Bengaluru, who wished the workshop a grand success. The inaugural session was followed by invited lectures. Talks on current research topics in graph theory spread over several sessions of the workshop on both days. An introductory session on the usage of Mathematical Software- Mathematica, in solving research problems on Graph Theory was also presented by the Lectures.

The participants of the workshop were immensely benefited by the invited talks arranged. It gave them new directions for research in graph theory as well as exposure to use **Mathematica software.**

. The workshop focuses on the fundamentals of graph theory relevant to learning, with the research topics on the applications of spectral clustering, visualisation and transductive learning.Methods from graph theory have made an impact in Machine Learning recently through two avenues.

The first arises when we view the data samples as the vertices of the graph with the similarity between the examples encoded by the weights on the edges. This view of the data can be used to motivate a number of techniques, including spectral clustering, nonlinear dimensionality reduction, and visualisation, transductive and semi-supervised classification.
The second reason for involving graph theory is through the representation of complex objects by graphs. This could be for objects that have a natural graph structure such as molecules or gene networks, or for cases where a feature extraction phase constructs a graph, as for example in natural language processing or computer vision.

A key development in this area has been the realisation that features spaces involving exponentially many features can be used implicitly via kernels that compute in polynomial time inner products between projections into the feature space. This use of graph representations is becoming common in many applications of machine learning making a focus on this topic relevant to a number of application areas, particularly bioinformatics and natural language processing.

The two day workshop concluded with a valedictory function on 04/01/2020 which was presided by Principal and Vice Principal. SFS College Bengaluru The function ended with distribution of certificates to the participants.

Name of the Reporter: PADMAVATHI V

SIGNATURE OF THE REPORTER

Co-ordinator
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PRINCIPAL
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ATTENDANCE LIST

EVENT NAME: RESEARCH AND DEVELOPMENT IN DISCRETE MATHEMATICS			
CLASS: MATHEMATICS			
DATE: 03/01/2020 to 04/01/2020			
RESOURCE PERSON: Dr.C Manjula Ph.D and U Mohan Chand			
SL.NO	**NAME**	**ROLL NO**	**Signature**
1	ALBERT JOES FRANCY	19NCAEC001	
2	BALAPUSHA B	19NCAEC002	
3	KARIANGAILIU GONMEI	19NCAEC003	
4	MANASA K C	19NCAEC004	
5	MEGHA M	19NCAEC005	
6	SHILPA	19NCAEC006	
7	SUMA S	19NCAEC007	
8	SUSHMITHA KRISHNAN	19NCAEC008	
9	TONY A J	19NCAEC009	
10	KISHORE Y J	19NCSMT001	
11	P C SUKANYA	19NCSMT002	
12	RAKSHITHA S	19NCSMT003	
13	RANI PRACHANDI	19NCSMT004	
14	SUSHMA R	19NCSMT005	
15	CHITHRA M	19NCSM8002	
16	HARSHITHA R	19NCSM8003	
17	JITHIN ABRAHAM	19NCSM8004	
18	JOSHITHA BABU	19NCSM8005	
19	MERIL K P	19NCSM8006	
20	PRASHANTHI K C	19NCSM8007	
21	PRAVALLIKA S G	19NCSM8008	
22	SUDHANGSU THAPA	19NCSM8009	
23	TERESSA SONIA	19NCSM8010	

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