SCHOOL OF COMPUTING

Date:01-04-2022

CIRCULAR

Sub: Organising Value-added Course on "Certificate course on ADVANCED DATABASE" - Reg.,

With reference to the above-mentioned subject, we bring it to your notice that School of Basic Sciences, Bharath Institute of Higher Education & Research is organizing **Value added course on "Certificate course on ADVANCED DATABASE".** The syllabus and registration form are enclosed below.

The candidates those who are interested to join must fill the registration form and submit to the HOD, School of Computing on or before **04.04.2022**.The Registration form received after the mentioned date shall not be entertained under any circumstances

Dean-Engineering

Copy To:

1. All HODs
2. Office File/ Notice Board

ADVANCED DATABASE - SYLLABUS

Unit 1

Overview of DBMS – Database design – Query processing. Data modeling – ER – EER –Object Oriented Databases – Object Relational Databases, Document oriented Databases – Background of NoSQL – XML document – Structure of XML Data – XML Document Schema – Querying and Transformation – API – Storage of XML Data – XML Applications.

Unit 2

Information Retrieval Systems, Databases – Multidimensional Indexes – Data Cubes, Grid Files, R-trees.

Unit 3

Distributed Databases – Data Distribution – Distributed Transactions, Parallel Databases – Performance measure – Parallel operations for relational operations, Information Integration – Federated Database – Data Warehouses – Mediators – Schema matching methods.

Text Books
- Silberschatz, Korth and Sudarshan, "Database Concepts", Sixth Edition, Tata McGraw Hill, 2010.

Resources
- Hector Garcia-Molina, Jeff Ullman, and Jennifer Widom, "Database Systems: The Complete Book", Pearson, 2011.
- Niall O'Higgins, "Mongo D B and Python", O'reilly, 2011.

LESSON PLAN

		Value Added Course on "Advanced Database "		
S.No	**Date**	**Topic**	**Time**	**Hours**
1	06-04-2022	Overview of DBMS – Database design	1.30-4.30 PM	3
2	07-04-2022	Query processing. Data modeling – ER	1.30-4.30 PM	3
3	08-04-2022	EER –Object Oriented Databases - Object Relational Databases,	1.30-4.30 PM	3
4	09-04-2022	Document oriented Databases – Background of NoSQL - XML document – Structure of XML Data	9.00-4.30 PM	7
5	11-04-2022	XML Document Schema – Querying and Transformation – API	1.30-4.30 PM	3
6	12-04-2022	Storage of XML Data – XML Applications.	1.30-4.30 PM	3
7	13-04-2022	Information Retrieval Systems, Databases – Multidimensional Indexes	1.30-4.30 PM	3
8	16-04-2022	Data Cubes, Grid Files, R-trees. Distributed Databases – Data Distribution – Distributed Transactions,	9.00-4.30 PM	7
9	18-04-2022	Parallel Databases – Performance measure – Parallel operations for relational operations, Information Integration –	1.30-4.30 PM	3
10	19-04-2022	Federated Database – Data Warehouses – Mediators – Schema matching methods.	1.30-4.30 PM	3

HEAD OF THE DEPARTMENT

Participant List

Value Added Course on "Certificate course on Advanced Database"

S.NO	REG.No	NAME OF THE CANDIDATE	DEPARTMENT
1	U20CR001	JONE S S	BCA-DA
2	U20CR002	KARTHIK RAJA L	BCA-DA
3	U20CR003	PRADEEP T	BCA-DA
4	U20CR004	PRAGATHEESWARAN S	BCA-DA
5	U20CR005	SAKTHIDASS B	BCA-DA
6	U20CR006	TAMIL AZHAGAN C	BCA-DA
7	U20CR007	BALAGANESAN R	BCA-DA
8	U20CA040	KATHIRAVAN T	BCA
9	U20CA041	KAVIYA K	BCA
10	U20CA042	KAVIYA B	BCA
11	U20CA043	KOWSALYA S	BCA
12	U20CA044	Krithika S	BCA
13	U20CA045	LAKSHMI J	BCA
14	U20CA046	LOKESH KUMAR D66	BCA
15	U20CA047	MADHAVAN K	BCA
16	U20CA048	MAHESH M	BCA
17	U20CA049	MANIKANDAN PARIDA S	BCA
18	U20CA050	MANOJ KUMAR S	BCA
19	U20CA092	SHARMILA P	BCA
20	U20CA093	SIDDHARTH S	BCA
21	U20CA094	SOWMIYA R	BCA
22	U20CA095	SREE DURGA B	BCA
23	U20CA096	SRIDHAR R	BCA
24	U20CA097	SRIJA B	BCA
25	U20CA107	THAMEEM ANSARI R	BCA
26	U20CA108	VAISHNAVI T	BCA
27	U20CA109	VAISHNAVI V	BCA

28	U20CA110	VENKATRAMAMOORTHY G	BCA
29	U20CA111	VIGNESH P	BCA
30	U20CA112	VIGNESHWARI V	BCA
31	U20CA113	VIJAY M	BCA
32	U20CA114	VIJAYARAJ S	BCA
33	U20CA115	VISHWA R	BCA
34	U20CA116	VISHWA S	BCA
35	U20CA117	YAHYA N	BCA
36	U20CA124	SUNDESH R	BCA
37	U20CA125	SRINATH S	BCA
38	U20CA126	VIJAY L	BCA
39	U20CA127	NILAVAZHAGAN M	BCA
40	U20CA128	DIVYA G	BCA
41	U20CA129	MAILEASH A	BCA
42	U20CA130	SANTHOSH KUMAR M	BCA
43	U20CA131	JAGAN R	BCA
44	U20CA132	ASHUTOSH KUMAR	BCA
45	U20CA133	GRANDHIPAVANTEJA	BCA

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

CERTIFICATE COURSE IN ADVANCED DATABASE
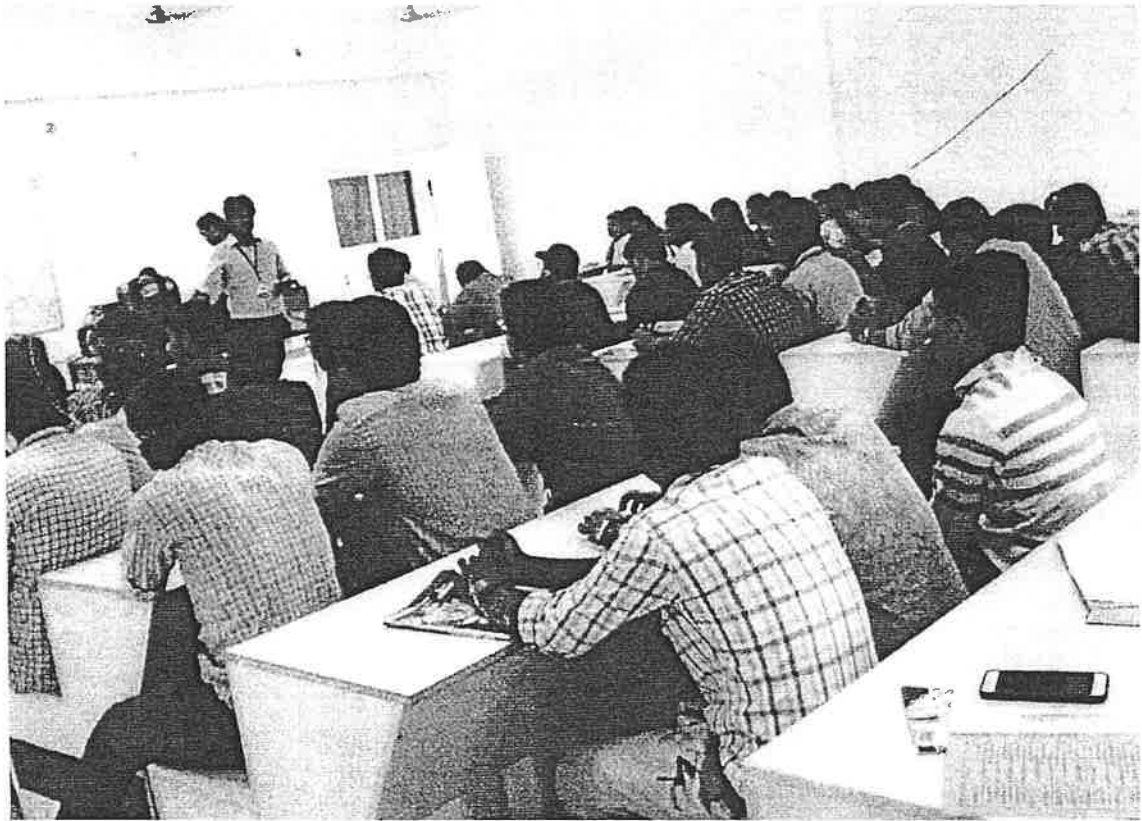
COURSE COORDINATOR

HEAD OF THE DEPARTMENT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH

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SCHOOL OF COMPUTING

CERTIFICATE OF PARTICIPATION

This certificate is awarded to Mr./ Ms. /   **PRADEEP** T for enthusiastic participation and completion of the Value Added Course **on ADVANCED DATABASE   from 06-04-2022 to 19-04-2022.**

COURSE COORDINATOR   **HOD**   **Dean-Engineering**