JHARKHAND Rai University
UGC RECOGNISED UNIVERSITY
ACCREDITED BY NAAC

Lesson Plan & Tracking

Programe : BCA	**Session : 2021- 24**	**Year : II**	**Sem: III**
Course: Database Management Systems			
Name of the Faculty: Rashmi Ranjan	**Commencement Date: 29/08/2022**		**Date of Closure: 30 Dec 2022**

Lecture No.	Week	Unit	Topics to be Covered	Blended Mode			Date	Duration	Tracking of Lectures	Related Course Outcome	Signature of Faculty	Signature of HoD	Remarks (if any)
				ICT Tool/Platform/ LMS	Resources	Activity							
1			Introduction to DBMS, architecture										
2			administration roles, data dictionary										
3			Traditional models										
4			three-level architecture, hierarchical model										
5			network model and relational model										
6			Relational model – definitions and properties										
7			keys integrity rules, relational algebra										
8			joins, set operations										
9			Tuple relational calculus and Domain relational calculus										
10			SQL constructs, PL/SQL, Query & its optimization techniques										
11			Singled valued functional dependencies										

12			Singled valued functional dependencies										
13			Database design, conceptual, logical and physical models										
14			ER diagram and model, normal forms (1, 2, 3, BCNF).										
15			Storage structure- Sequential, Indexed Sequential										
16			B+ tree – creation, insertion & deletion										
17			Indexing- Primary, Secondary, Multi Level.										
18			Relational databases. Relational Data Integrity										
19			Candidate keys and related matters										
20			CaPrimary and alternate keys.										
21			Foreign keys, foreign key rules, nulls.										
22			Candidate keys and nulls, foreign key and nulls										
23			The SQL Language:Data definition, retrieval and update operations										
24			Table expressions conditional expressions, embedded SQL. Views										
25			Introduction, what are views for, data definition data manipulation, SQL support.										
26			Network model: basic concepts, data structure diagrams										
27			DBTG CODASYL model, DBTG data retrival facility, DBTG update facility										

28			DBTG set processing facility, mapping networks to file										
29			DBTG set processing facility, mapping networks to file										
30			ata retrieval facility, update facility, virtual records, mapping hierarchical to files, hierarchical system.										