RGPV (DIPLO WING) BHOP		OBE CURRICULUM FOR DATABASE MANAGEMENT SYSTEM	format- 3	Sheet No. 1/3	
Branch		Computer Science and Engineering/Information Technology	Se mes te r	IV	
Course Code	403	Course Name	DATAB MANAGE SYSTI	EMENT	
Course Outcome 1		rstand the Basic concepts and need of Database gement systems including Query Language and Model.		Marks	
Learning Outcome 1		fy the need of Database Management systems ne help of Architecture of DBMS.	8	10	
Contents	Advan archite	Concepts, Database approach v/s Traditional fi tages of database systems, Database system app cture: Mapping between views, DBMS users, F er, Schemas and instances, Data independence.	plications, Th	nree leve	
Method of Assessment	Quest	ion Paper -External- End Sem Theory Exam			
Learning Outcome 2	rate Overall Structure of Database and Query age.	6	10		
Contents		Base Language: Data Definition Language, Data Nata Control Language, Overall Database Structure.	Ianipulation	Language	
Method of Assessment		Question Paper -Internal Progressive	Test		
Learning Outcome 3		fy Data Model and give Example of Entity on Data Model.	8	10	
Contents	types Relatic Definit	action and Classification of Data Model, Compar- of models, ER data model: Entitles and att onship among entities, representation of assocrang the E-R diagram, Concept of Generalization lization, keys.	ributes, Enti iation & rel	ty types. ationship	
Method of Assessment		Question Paper -External- End Sem Theor	y Exam		
Learning Outcome 4	-	n Relational Model and Codd's Relational ase Rules.	8	10	
Contents	relation Candic	onal Model: Attributes and Domains, tuples, relation n representation, relationship, integrity rules late, Check, Foreign key), Transforming ER dia s Relational database rules.	(Primary,	Unique,	
Method of		Question Paper -External- End Sem Theo	ory Exam		

Course Outcome 2	Design Data Base with the help of various Relational algebra Operations and Normal Forms.	Hrs	Marks				
Learning Outcome 1	Define various Relational algebra Operations.	8	10				
Contents	Relational algebra and relational calculus, Relational alg like select, Project, Union ,set difference, Cartesian additional operations like Set intersection, Natural Join right and Full).	product, re	name and				
Method of Assessment	Question Paper -External- End Sem Theo	ry Exam					
Learning Outcome 2	Compare Relational algebra and relational calculus Query Language.	8	10				
Contents	Introduction and Comparison of relational calculus i.e domain oriented relational calculus	. Tuple or	iented and				
Method of Assessment	Question Paper-Internal Progressive Test						
Learning Outcome 3	Identify Functional dependency and Referential integrity.	8	10				
Contents	Functional dependency: Definition, inference axis dependency, closure, cover and equivalence of FD, Refere		functional				
Method of Assessment	Question Paper -External- End Sem Theory Exam						
Learning Outcome 4	Build Data Base with the help of Normal Forms.	10	10				
Contents	Data Base Design : Concept of Normalization, Decomp Lossy Decomposition, Normal forms, 1 NF, Data anom dependency, 2 NF, Data anomalies in 2 NF, Transitive D anomalies in 3 NF, Boyce-Codd Normal Form.	alies in 11	NF, Partial				
Method of Assessment							
Method of Assessment							
	Develop Query Based Data Base Applications.	Hrs	Marks				

Contents	Introduction to my SQL language, Structur writing guidelines, Data Definition com Creating a Table ,Use, Altering the Datab DESCRIBE, Dropping the Database, Dropp	nands: Creatin base, Altering	ng a Databas the Table, R	se, Show ENAME
Method of Assessment	Lab Manual -Exte	rnal Practical	-	_
Learning Outcome 2	Modify Data Base and Tables with the h	elp of DML.	9	10
Contents	Data Manipulation Statements: SELEC (FROM, WHERE, GROUP BY, HAVINC DELETE, REPLACE.			
Method of Assessment	External Pr	actical		
Learning Outcome 3	Make use of Aggregate Functions Constraints.	and Various	9	10
Contents	Aggregate Function (AVG, COUNT, MAX keys, foreign keys, Unique Keys, CHECK constraints from tab e.	,	01	•
Method of Assessment	External Pr	actical		
Learning Outcome 4	Conclude Various Joins Operations statements.	and View	. 9	10
Contents	Joins (INNER, OUTER, SELF) and SELF Statement, ALTER VIEW Statement , DRO	,		W
Method of Assessment	Lab Manual -Internal P	ractical- lab v	vork	
Course Outcome 4	Outline Advance Database Concepts.	Hrs	Mar	ks
Learning Outcome 1	Explain Trigger and Database Connectivity to various languages.	09	10)
Contents	Overview of Trigger with example, Da Languages	atabase Conne	ectivity with	Various

Method of Assessment	Internal Practical-	Internal Practical- lab work							
Learning Outcome 2	Define Transaction, concurrency control, Object and Cloud based Database.	10							
Contents	Transaction), Overview of concurrency conc	roduction to transactions (ACID Property and Implicit and Explicit ansaction), Overview of concurrency control, Object based database and eir Classification, Basic Concepts of Cloud based database with its vantages and Disadvantages.							
Method of Assessment	Assignment- Internal(Term Work)								
Learning Outcome 3	Compare Data mining, Data Wa re ho us ing and Distributes Database.	05	10						
Contents	Disadvantages, Comparison of Data	Explain Data mining & Data Warehousing with it's advantages an Disadvantages, Comparison of Data mining & Data Warehousing Architecture of Distributed Database and also it's Classification with it advantages and Disadvantages							
Method of Assessment	Question Paper -External- Er	Question Paper -External- End Sem Theory Exam							

RGPV (Diploma Wing) Bhopal COURSE NAME DATABASE MANAGEME		SCHEME FOR LEARNING OUTCOME	Branch Code	Course Code 403	CO Code	LO Code	Format No. 4			
COURSE NAME	DATABASE MANAGEME	ATABASE MANAGEMENT SYSTEM								
CO Description	Understand the Basic cond	nderstand the Basic concepts and need of Database Management systems including Query Language and Data Model.								
LO Description	Identify the need of Datab	ase Management systems with the help	of Architecture	of DBMS.						

		SCHEME OF S	TUDY				
S. No.	Learning Content	Teaching -Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1	DBMS Concepts, Database approach v/s Traditional file accessing approach, Advantages of database systems, Database system applications, Three level architecture: Mapping between views, DBMS users, Functions of DBA and designer, Schemas and instances, Data independence.	Traditional Lecture method + Handout+Videos	Teacher will explain the contents and provide handout to students. Teacher will conduct quiz to make students practice their knowledge	-	0		NIL

SCHEME OF ASSESSMENT

5. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	External / Internal
1	Fuel Com Theory From	For the given content student will be asked Need of Database Management systems and their Architecture		Question/Test Paper /quiz questions	External

RGPV (Diploma Wing) Bhopal		SCHEME FOR LEARNING OUTCOME	Branch Code C04	Course Code	CO Code	LO Code	Format No. 4			
COURSE NAME	DATABASE MANAGEME	ATABASE MANAGEMENT SYSTEM								
CO Description	on Understand the Basic concepts and need of Database Management systems including Query Language and Data Model.									
LO Description	Elaborate Overall Structur	e of Database and Query Language								

		SCHEME OF ST	UDY				
S. No.		Teaching -Learning	Description of T-L		Pract. /Tut		Remarks
	Learning Content	Method	Process	Hrs.	Hrs.	LRs Required	
1	Data Base Language: Data Definition	Traditional Lecture	Teacher will explain	6		Handouts	NIL
	Language, Data Manipulation Language and	method + Handout +	the contents and			/Videos + ppt /	
	Data Control Language, Overall Database	Videos	provide handout to			Books / E-	
	Structure.		students.			Contents	
			Teacher will				
			conduct quiz to				
			make students				
			practice their				
			knowledge				

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	External / Internal
1	Internal Progressive Test	For the given content student will be asked Data Base Language and Database Structure.	10	Question/Test Paper /quiz questions	Internal

RGPV	GPV (Diploma Wing) Bhopal SCHEME FOR						Course Code 403	CO Code	Format No. 4		
COURS	E NAME	DATABASE MANAG	GEMEN	T SYSTEM							
O Desc	ription	Understand the Basi	ic conce	epts and need of Data	abase N	lanagement s	ystems iı	ncluding Que	ry Langu	age and Da	ata Model.
O Desci	ription	Classify Data Model	and giv	e Example of Entity	Relatior	Data Model.	-				
				SCI	HEME O	F STUDY					
S. No.		Learning Content		Teaching -Learning Method		ption of T-L rocess	Teach Hrs.	Pract. /Tut Hrs.	LRs I	Required	Remarks
1	Data Mo the three model: Entity tr entities, association the E-F Generalia	tion and Classificat odel, Comparison b e types of models, I Entitles and att ypes, Relationship representation on & relationship, I R diagram, Conce zation, Aggregation ation, keys.	etween ER data cributes, among of Defining ept of	Videos	the co provide students Teacher	will conduct make students their	08	00	Handout ppt / Bo Content	-	NIL
CHEME	OF ASSE	SSMENT									T
S. No.	Metho	od of Assessment	Des	cription of Assessme	nt	Maximu Mark		Resou	rces Rec	Juired	External / Internal
1	End S	em Theory Exam k	oe aske	given content stude d about Data Mod of ER Model				Question/Test Paper /quiz questions			External
			ADD		ONS FOR	R THE HOD/ F	ACULTY (IF ANY)			

		SCHEME	FOR LEAF	RNING	Branch Code	C οι	urse Code Co	D Code LO Code	Format No.
RGP	V (Diploma Wing) Bhopal	0	OUTCOME		C04		403		4
COURS	E NAME DATABASE MANAGEMI	NT SYSTEM						l	•
O Desc	ription Understand the Basic cor	cepts and need o	f Database N	lanagem	ent systems inc	luding Qu	uery Langu	age and Dat	a Model.
O Desc	ription Explain Relational Model	and Codd's Relati	ional databa	se Rules.					
			SCHEME O	F STUDY					
S. No.	Learning Content		Teaching - L Metho	-	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
	Relational Model: Attributes and relations and their schemas, relatio relationship, integrity rules (I Candidate, Check, Foreign key), ' diagram into the tables, Codd's R rules.	on representation, rimary, Unique, Fransforming ER	method + Har Videos	ndout +	Teacher wil explain the contents and provide handou to students. Teacher wil conduct quiz to make students practice thei		00	Handouts /Videos + pp / Books / E- Contents	NIL t
		S	CHEME OF A	SSESSME	INT				
S. No.	Method of Assessment	Description of	Assessment		Maximum Mark	Marks Resources Require		es Required	External , Internal
1	1 End Sem Theory Exam Relational Mod rules and Codd				10			/Test Paper questions	External

RGP\	/ (Diplo	ma Wing) Bh	opal	SCHEME FC OUT	OR LEAR COME	NING	Branch	Code	Course Code	CO Code	LO Co F	ormat No.
COURS	E NAME	DATABASE MANA	GEME	NT SYSTEM								
CO Desc	ription	Design Data Base wit	h the h	elp of various Relatio	onal algebra	Operatio	ns and Norn	nal Forms.				
LO Desc	ription	Define various Rela	tional	algebra Operations	•							
				:	SCHEME O	F STUDY						
5. No.	l	Learning Content		Teaching -Learning Method	Descriptio Proc		Teach Hrs.	Pract. /Tut Hrs.	LRs R	equired	R	emarks
1	calculus, operatior Union ,s product, operatior	ns like select, F et difference, Ca rename and ado ns like Set inters Join, Division ,Jo	Basic Project, rtesian litional ection,	method + Handout + Videos	Teacher w the conte provide ha students. Teacher wi quiz to students their know	ents and ndout to Il conduct make practice		00	Handouts ppt / Book Contents	•	NIL	
	1			SCH	IEME OF AS	SESSME	NT		1			
5. No.	Metho	d of Assessment	De	escription of Assess	ment		imum arks	Resou	rces Requ	ired		ternal / nternal
1	End Se	em Theory Exam	be ask	e given content stu ed about Relationa tions and relational	al algebra	:	10	Question	/Test Pap questions	er /quiz	E	xternal
				DITIONAL INSTRUC								

RGPV	' (Diploma Wing) Bho	opal SC	CHEME FOR LEA OUTCOME		Branch Code C04	Course Co 403	ode CO	Code LO Code	Format No. 4
	E NAME DATABASE MANA								
CO Desc	ription Design Data Base wit	th the help of	various Relational alg	ebra Operations a	and Norm	al Forms.			
LO Desci	ription Compare Relational	algebra and	relational calculus Q	uery Language					
			SCHEME	OF STUDY					
S. No.	Learning Content	t	Teaching - Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs I	Required	Remarks
1	Introduction and Comp relational calculus i.e. Tup and domain oriented relatior	ole oriented	method + Handout + Videos	Teacher will explain the contents and provide handout to students. Teacher will conduct quiz to make students practice their knowledge	8	00	Handout ppt / Bo Content	•	NIL
			SCHEME OF	ASSESSMENT			-		
S. No.	Method of Assessment	Descript	ion of Assessment	Maximum N	Marks	Resourc	es Requ	ired	External / Internal
1	Internal Progressive Test	be asked	n content student w Tuple oriented ar oriented relation	nd 10		Question/1 qu	est Pap estions	er /quiz	Internal
	II	ADDITIO	NAL INSTRUCTIONS F	OR THE HOD/ FA	CULTY (IF	· ANY)			

RGPV (Diplo	oma Wing) Bhopal	SCHEME FOR LEARNING OUTCOME	Branch Code C04	Course Code 403	CO Code	LO Code	Format No. 4
COURSE NAME	DATABASE MANAGEME	NT SYSTEM					
CO Description	Design Data Base with the	elp of various Relational algebra Operatio	ns and Normal F	orms.			
LO Description	Identify Functional depen	dency and Referential integrity					

		SCHEME	OF STUDY				
S. No.		Teaching - Learning	Description of T-		Pract. /Tut		Remarks
5	Learning Content	Method	L Process	Teach Hrs.	Hrs.	LRs Required	Remarks
1	Functional dependency: Definition,	Traditional Lecture	Teacher will	08	00	Handouts /Videos	NIL
	inference axioms for functional	method + Handout +	explain the			+ ppt / Books / E-	
	dependency, closure, cover and	Videos	contents and			Contents	
	equivalence of FD, Referential integrity		provide handout				
			to students.				
			Teacher will				
			conduct quiz to				
			make students				
			practice their				

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Resources Required	External / Internal
1	End Sem Theory Exam	For the given content student will be asked about Functional Dependency and it's rules		Question/Test Paper /quiz questions	External

RGP\	/ (Diplo	oma Wing) Bhopal	SCHEME Ol	FOR LEAF JTCOME	RNING		nch Code C04	Course Code	CO Code	Format No. 4
COURS	SE NAME	DATABASE MANAGEM	ENT SYSTEM							
O Desc	cription	Design Data Base with the	help of various Re	lational algeb	ra Operations	and Nor	mal Forms.			
O Desc	ription	Build Data Base with the	help of Normal Fo	orms.						
				SCHEME O	F STUDY					
5. No.		Learning Content	Teaching - Learning Method		ion of T-L cess	Teach Hrs.	Pract. /Tut Hrs.	LRs Re	equired	Remarks
<u> </u>	Normaliz i.e L Decompo NF, Dat Partial d anomalio Depende	osition, Normal forms, 1 a anomalies in 1 NF, dependency, 2 NF, Data es in 2 NF , Transitive ency, 3NF, Data es in 3 NF, Boyce-Codd	method + Handout + Videos	contents a handout to st Teacher will	nd provide udents. conduct quiz dents practice	10	00	Handouts ppt / Book Contents		NIL
			S	CHEME OF AS	SSESSMENT		•			
. No.	Me	thod of Assessment	Description of A	ssessment	Maxim Mark		Reso	urces Req	uired	External / Internal
1	En	d Sem Theory Exam	For the given cont will be asked to I Base using Norma	Design Data	10			n/Test Pap questions		External
	<u> </u>	A		UCTIONS FOR	R THE HOD/ F	ACULTY (IF ANY)			I

RGPV	(Diplo	ma Wing) Bho	opal	SCHEME LEARNING O			h Code 04	Course Code 403	CO Code	LO Code	Format No. 4
COURS	SE NAME	DATABASE MANA	GEMENT SYS	ΓΕΜ							
CO Desc	cription	Develop Query Bas	ed Data Base A	pplications.							
LO Desc	ription	Build Data Base an	d Tables with t	he help of DDL.							
				SCHEME	OF STUDY						
S. No.		Learning Conte	nt	Teaching -Learning Method	Description Proce		Teach Hrs.	Pract. /Tut Hrs.	LRs Re	quired	Remarks
1	writing comman Creating Database DESCRIB	e of my SQL statem guidelines, Dat ds: Creating a Da a Table ,Use, e, Altering the Ta	ents & my SQL a Definition tabase, Show, Altering the ble, RENAME, ne Database,	method + Handout + Videos	Teacher will e contents and handout to stu Teacher will quiz to make practice knowledge.	l provide udents. conduct	00		Handouts /Videos + Books / E Contents	- ppt / -	NIL
				SCHEME OF /	ASSESSMENT						
S. No.	Metho	od of Assessment	Description	n of Assessment	Maxii	mum Mar	ks	Resour	ces Requ	uired	External / Internal
1	Ext	ernal Practical	be asked to	content student will Create Table , Dropping the Table		10			1anual /o stion/Vi-	•	External

RGP\	/ (Diplon	na Wing) Bho	pal SCHEME FC	DR LEAR	NING	В	ranch Co C04		urse Code CC 403) Code	LO Code Fo	ormat No. 4
		ATABASE MANAG	GEMENT SYSTEM									
CO Desc	ription D	evelop Query Base	d Data Base Applications	5.								
LO Desc	ription N	lodify Data Base ar	nd Tables with the help o	f DML.								
				SCHEME OF	STUD	Y						
S. No.		Learning Co	ontent	Teachir Learni Metho	ng	Descripti T-L Proe		Teach Hrs.	Pract. /Tu Hrs.		LRs Required	Remarks
1	that are c	lescribed in (FRO	ents: SELECT statement M, WHERE, GROUP BY, RT, UPDATE, DELETE,	Lecture me	thod + /ideos	Teacher explain contents provide handout students. Teacher conduct q make stu			09	/Vi / B	ndouts ideos + ppt ooks / E- ntents	NIL
			SCH	IEME OF AS	SESSM	IENT						
S. No.	Method	ofAssessment	Description of Assess	ment		Maximu	m Ma	rks	Resources	Rec		External / Internal
1	Exter	nal Practical b	or the given content st e asked to Manipulat Database using DML State	e Table ,		1	0		Lab Man questio	-	•	External

RGPV	/ (Diplo	ma Wing) Bho	pal	CHEME FOI		NING	Branch Coo C04	de	Course Code 403	CO Code	LO Code	Format No. 4
COURS	E NAME	DATABASE MANAG	SEMENT S	YSTEM								
O Desc	ription	Develop Query Base	d Data Bas	se Applications.								
O Desc	ription	Make use of Aggrega	ate Functio	ons and Various	Constrair	nts.						
				S		F STUDY						
S. No.		Learning Content	:	Teaching - Learning Method	Descri	ption of T	-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs F	Required	Remarks
	MAX, MI foreign constrair	egate Function (ANN, SUM). Defining pr keys, Unique Ke hts in a table, hts from table.	rimary ke ws CHE		to studer Teacher	and prov nts. will cond cudents p	xplain the ide handout uct quiz to ractice their	00	09	Hando /Vide Books Conte	os + ppt / / E-	NIL
				SCHE	ME OF AS	SSESSMEN	IT					
S. No.	Metho	d of Assessment	Descrip	otion of Assessm	ent	Ma	ximum Marl	٢S	Resources	Requ	iired	External / Internal
1	Exte	ernal Practical b	e asked to	en content stuc about use of Ag d Constraint.			10		Lab Man questio			External
	1		ADDITI	ONAL INSTRUCT	IONS FOF)/ FACULTY (IF ANY)	I			

RGPV	/ (Diplo	ma Wing) Bho	opal SCI	HEME FOR LEA OUTCOME		Branch Code	c04	Course Code 403	CO Code	LO Code	Format No. 4
COURS	E NAME	DATABASE MANA	GEMENT SYS	TEM							
CO Desc	ription	Develop Query Base	ed Data Base A	pplications.							
O Desci	ription	Conclude Various Jo	oins Operation	s and View statemer	nts.						
				SCHEME	OF STUDY						
5. No.		Learning Conter	nt	Teaching -Learning Method	Descriptic Proc		Teach Hrs.	Pract. /Tu Hrs.	t LRs Re	quired	Remarks
1	View VIEW	NER, OUTER, SELF) a (CREATE VIEW Stat Statement, I ment.	ement, ALTER		Teacher will contents ar handout to stu Teacher will o to make studo their knowled	id provide udents. conduct quiz ents practice		09		Books ,	leos NIL / E-
	1			SCHEME OF	ASSESSMENT			1			
5. No.	Metho	d of Assessment	Descriptio	n of Assessment	Махіі	num Marks		Resource	es Requi	ired	External / Internal
1	Internal	Practical- lab work	-	content student will bout use of Various ition and View		10		Lab Ma questi	nual /q on/Vi-V		Internal
	I		ADDITION	AL INSTRUCTIONS FO	DR THE HOD/	FACULTY (I	F ANY)				

	//		SCI	HEME FOR LEARNII	NG	Branch Code		se Code	CO Cod	de LO Code		л
RGPV		ma Wing) Bho	pai	OUTCOME		C04	4	03			For	mat No. 4
COURS	E NAME	DATABASE MANAG	GEMENT SYS	ΓΕΜ	•							
O Desc	ription	Outline Advance Dat	abase Concep	ots.								
O Desc	ription	Explain Trigger and I	Database Con	nectivity to various langu	ages.							
				SCHEME OF ST	UDY							
5. No.		Learning Content		Teaching -Learning Metho	•	tion of T-L ocess	Teach Hrs.	Pract. / Hrs		LRs Requii		Remarks
L	Overview Database Language	Connectivity w	• •	Traditional Lecture method Handout + Videos	the co	ntents and handout to s. will quiz to students their	00	09		Handout /Videos ppt / Boo / E-Cont	+ oks	NIL
				SCHEME OF ASSES	SMENT	I						
6. No.	Metho	od of Assessment	Descriptio	on of Assessment	Maxi	mum Marks	5		sour equir			kternal / nternal
1	Internal	Practical- lab work b	•	content student will about Trigger and f Database		10		Lab Ma quest		ıl /quiz ′Vi-Va	I	nternal
	1		ADDITION	AL INSTRUCTIONS FOR TH	E HOD/ F	ACULTY (IF /	ANY)	1				

RGP\	/ (Diploma W	ling) Bhon	al SCHEME	FOR LEARN	IING	-			Code LO Code	Format No.
			0	UTCOME		C04	4	03		FUTHAL NO.
COURS		ASE MANAGE	MENT SYSTEM							
O Desc	ription Outline	Advance Data	base Concepts.							
O Desc	ription Define 1	Fransaction, co	ncurrency control,	Object and Cloud	based	d Database.				
				SCHEME OF	STUDY	Y				
. No.		earning Conte		Teaching -Lean Method	ning	Description of T-L Process	Teach Hrs.	Pract. /To Hrs.	ut LR Requ	Remar
	Implicit and Exp concurrency con	olicit Transacti trol, Object ba on , Basic C	CID Property and ion), Overview of ised database and oncepts of Cloud advantages and	method + Handou Videos	t+ t 	Teacher will explain the contents and provide handout to students. Teacher will conduct quiz to make students		00	Handou /Videos / Books Content	+ ppt / E-
				SCHEME OF ASS	SESSM	1ENT				
5. No.	Method of Ass	sessment	Description of As	sessment		Maximum Marks			urces uired	External , Internal
1	Internal(Tern	n Work) be	the given conten asked to about ject and Cloud base	Transaction,		10		Assignm questio	ent/quiz n/Vi-Va	Internal
			ADDITIONAL INST	RUCTIONS FOR	THE H	IOD/ FACULTY (IF A	NY)	<u> </u>		

RGD\	/ (Dinla	oma Wing) Bho	SCHEN	JE FOR LEARN	ING	Branch Code	Co	urse Code 403	CO Code	LO Code	Format No.
				OUTCOME		C04	C04				FOITHAL NO
COURS	E NAME	DATABASE MANAG	GEMENT SYSTEM								
O Desc	ription	Outline Advance Dat	abase Concepts.								
O Desc	ription	Compare Data mining	g, Data Warehousi	ing and Distributes	Database.						
				SCHEME OF	STUDY						
. No.		Learning Conte	ent	Teaching -Learning Method	-	ption of T-L rocess	Teach Hrs.	Pract. /Tut Hrs.	LRs	Require	d Remark
-	its adv Comparis Wareho Database	0)isadvantages , nining & Data of Distributed ification with its	method + Handout + Videos	contents handout t Teacher	will explain the and provide to students. will conduct make students their ge.		00		/ Books /	leos NIL ' E-
				SCHEME OF ASS	ESSMENT				•		
. No.	. Method of Assessment Description of		Assessment	Max	aximum Marks		Resources Required		External / Internal		
1	End S	em Theory Exam	For the given content student wil be asked about Data mining , Data Warehousing and Architecture of Distributed Database.			10		Question/Test Paper /quiz questions		•	External
	<u> </u>		ADDITIONAL IN		THE HOD/	FACULTY (IF #	ANY)	<u> </u>		I	

DATABASE MANAGEMENT SYSTEM COURSE OUTCOME(S) & LEARNING OUTCOME(S)

STUDENT WILL BE ABLE TO-

Course objective Details				
CO-1	Understand the Basic concepts and need of Database Management systems including Query Language and Data Model.			
CO-2	Design Data Base with the help of various Relational algebra Operations and Normal Forms			
CO-3	Develop Query Based Data Base Applications.			
CO-4	Outline Advance Database Concepts.			
Total				

CO-1	CO-1 Understand the Basic concepts and need of Databas Management systems including Query Language and Dat Model.						
LO-1	LO-1 Identify the need of Database Management systems with the help of Architecture of DBMS.						
LO-2	LO-2 Elaborate Overall Structure of Database and Query Language.						
LO-3	Classify Data Model and give Example of Entity Relation Data Model.						
LO-4	Explain Relational Model and Codd's Relational database Rules.						

CO-2	Design Data Base with the help of various Relational algebra Operations and Normal Forms.			
LO-1	Define various Relational algebra Operations.			
LO-2	Compare Relational algebra and relational calculus Query Language			
LO-3	Identify Functional dependency and Referential integrity.			
LO-4	Build Data Base with the help of Normal Forms.			

CO-3	Develop Query Based Data Base Applications.					
LO-1 Build Data Base and Tables with the help of DDL.						
LO-2	Modify Data Base and Tables with the help of DML.					
LO-3	Make use of Aggregate Functions and Various Constraints.					
LO-4	Conclude Various Joins Operations and View statements.					

CO-4	Outline Advance Database Concepts.				
LO-1	1 Explain Trigger and Database Connectivity to various languages.				
LO-2	Define Transaction, concurrency control, Object and Cloud based Database.				
LO-3	Compare Data mining, Data Warehousing and Distributes Database.				

Course outcome	Learning outcome	Assessment	Hours	Marks	Remark
	LO1	External(th)	8	10	End Sem Theory Exam
CO1	LO2	Internal (th)	06	10	Prog Test -I
(30 HRS) (40 MARKS)	LO3	External(th)	8	10	End Sem Theory Exam
	LO4	External(th)	8	10	End Sem Theory Exam
	LO1	External(th)	08	10	End Sem Theory Exam
CO2	LO2	Internal (th)	08	10	Prog Test -II
(34 HRS) (40MARKS)	LO3	External(th)	08	10	End Sem Theory Exam
	LO4	External(th)	10	10	End Sem Theory Exam
	LO1	External (pr)	09	10	Practical exam
CO3 (36 HRS)	LO2	External (pr)	09	10	Practical exam
(40 MARKS)	LO3	External (pr)	09	10	Practical exam
	LO4	Internal (pr)	09	10	Lab Work
CO4	LO1	Internal (pr)	09	10	Lab Work
(20 HRS) (30 MARKS)	LO2	Internal(th)	06	10	Term Work
(30 IVIAKKS)	LO3	External(th)	05	10	End Sem Theory Exam

	Progressive	Term Work (Internal)	Lab work(Internal)	Practical (External)	End Sem exam (External)	Total
CO1	10				30	40
CO2	10				30	40
CO3			10	30		40
CO4		10	10		10	30
Total	20	10	20	30	70	150