	St.Aloysius' College (Autonomous) Jabalpur					
	Part A : Introduction					
Pro	ogram: DIPLOMA	Class : B.Com	Sem:- III	S	ession :2023-2024	
Sı	ubject:-	Computer Applicati	on	I		
1.	Course Code	S2-COAP1T				
2.	Course Title	Database Managem	ent System			
3.	Course Type(Core Course/Elective/Generic Elective/Vocational/)Elective					
4.	Pre-requisite(If any)					
 5. Course Learning Outcomes (CLO) On the completion of this course student will be able - To understand database concepts, applications, structure need and database terminologies. To know about fundamentals of Relational Algebra and recovery & backup. To gain skills to create logical design of databases, including the E R method and normalization approach. To explore issues of transaction processing and concurrency control. To get knowledge of Database and create own Database. For implementation of different security features to secure t database. 6. Credit Value 			will be able - oplications, structure, ational Algebra and f databases, fization approach. assing and oject management reate own Database. ty features to secure the			
		Part B: Conten Database Manag	t Of the Cour	Se em		
	Total N	lo. of Lectures =45	(in hours p	er week):3-0-	0	
Un	hit	Topics		No. of Lectures		
I Introduction: Database of database systems; D logical, conceptual a dictionary, Data bas Relational, Hierarchic disadvantages		e system concepts, Data base system, Advantages 11 Data Architecture of data system: View/Schema, and physical and their interrelationship, data se administrator. Types of Data Models:- ical and Network Model their advantages and			11	
II Entity Relationship &Entity set, Relation Constraints, Keys, Strong & weak ent Reducing ER diagram		Model as a tool of conceptual design: Entities11nship & Relationship set, Attributes, Mapping11Entity- Relationship diagram (E-R diagram) :11ties, Generalization, Specialization, Aggregation,11to tables11				

III IV	Normalization and SQL concept :- Normalization: First, Second, Third & BCNF Normal Forms, Introduction to SQL,tuple, attribute, Data types, key constraints:- primary key, Candidate key, Integrity rules : Entity integrity, Referential integrity rule.SQL Commands:- , DDL, DML, DCL, TCL syntax and examples, select query with all the clauses. Like Predicate , Operator (Between, In , Not in) Advance SQL:- SQL join operations, Sub queries and correlated queries, SQL Functions. Constraints in SQL. Introduction to PL/SQL :-PL/SQL structure, Cursors, Triggers, Stored Procedures and functions.	11
	Part C: Learning Resources	
	 Suggested Digital Platforms, Web links <u>https://www.greatlearning.in/academy/learn-for-free/courses/database-management-systems-dbms</u> <u>https://www.learnvern.com/course/database-management-tutorial-hindi</u> <u>https://www.learnvern.com/course/database-management-tutorial-hindi</u> <u>https://www.learnvern.com/course/database-management-tutorial-hindi</u> <u>https://www.learnvern.com/course/database-management-tutorial-hindi</u> <u>https://www.geeksforgeeks.org/dbms/</u> <u>https://www.geeksforgeeks.org/dbms/</u> <u>https://www.tutorialspoint.com/database tutorials.htm</u> <u>https://www.iavatpoint.com/dbms-tutorial</u> <u>https://beginnersbook.com/2015/04/dbms-tutorial</u> <u>https://www.studytonight.com/dbms/</u> <u>https://www.studytonight.com/dbms/</u> <u>https://www.studytonight.com/dbms/</u> <u>https://www.g.com/dbms-tutorial.html</u> <u>https://www.g.com/dbms-tutorial.html</u> <u>https://www.tutorialcuy.com/dbms</u> <u>https://www.tutorialcuy.com/dbms</u> <u>http://i/yww.mphindiqranthacademy.org/</u> Suggested Readings: An Introduction to Database System by Bipin Desai. <u>"Database Management Systems" by Raghu Ramakrishnan</u> <u>"Database Management Systems" by Relmasri and S Navathe</u> <u>"Database Management Systems" by Relmasri and S Navathe</u> <u>"Database Management Systems" by Ne Relmasri and S Navathe</u> <u>"Database Management Systems" by Johannes Gehrke and Raghu Ramakrishnan</u> Books published by M.P. Hindi Granth Academy, Bhopal 	

Part D:- Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks : 100Continuous Comprehensive Evaluation (CCE) : 40 marks 'University Exam (UE) : 60 marksInternal Assessment :Class TestTotal 40Continuous ComprehensiveAssignment/PresentationSection(A) : Objective QuestionsTotal 60Section (B) : Short QuestionsTotal 60Section (C) : Long QuestionEvaluation (CCE):40External Assessment:University Exam Section: 60 Time : 03.00 Hours

	St. Alovsius' College Autonomous Jabalnur						
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	PartA: Introduction						
Pro	Program: Diploma Class : BCom Sem :- III session:2023-202						
	Subject:		Computer A	pplication			
1.	Course Code	S2-COAP1T					
2.	Course Title	DBMS (Practical	()				
3.	Course Type	Elective					
4.	Pre-requisite						
5.	 5. Course Learning Out comes(CLO) On the completion of this course student will be able - To understand database concepts, applications, structure, need and database terminologies. To know about fundamentals of Relational Algebra and recovery & backup. To gain skills to create logical design of databases, including the ER method and normalization approach. To explore issues of transaction processing and concurrency control. To get knowledge of Database and create own Database. 			be able - s, structure, ebra and including the ER oncurrency control. gement skills. Database. o secure the database.			
6.	Credit Value	1					
7.	Total Marks	Max.Marks: 40+	60	Min.PassingMa	arks: 35		
	Part B: Contents of the Course Data Base ManagementSystem(Practical)						
	Total No. of Practical =30 (each of 2 hours duration (1 Practical per week))						
	Practical will be conducted based on the theory Syllabus						

1. Create a table with name "Employee" having following fields:-

Field Name	Data Type	Size	Constraint
Eid	Number	10	Primary Key
Ename	Char	20	Not null
Designation	Char	30	Not null
Age	Number	10	Not null
City	Varchar2	25	Not null
Department no	Varchar2	30	Not null
Salary	Decimal	(7,2)	Not null
BankName	Varchar2	30	Not null

Insert the following records in above table structure .

Eid	Ename	Designation	Age	City	Department	Salary	BankName
101	Ford	Manager	24	Mumbai	D1	67820.50	HDFC
102	Jenny	Asst. Mng.	30	Delhi	D1	45750.40	Axis
103	Mary	Clerk	35	Goa	D1	32000.00	Canara
104	Smith	Clerk	28	Madras	D1	28000.00	FBC
105	James	Clerk	27	Mumbai	D1	29000.00	ICICI
106	Anny	Clerk	32	Kolkata	D1	25000.00	Axis
107	Jones	Clerk	34	Delhi	D1	27000.00	HDFC
108	Michal	Clerk	31	Goa	D1	24000.00	FBC

Execute the following queries

- 1. WAQ to insert one new record in the table.
- 2. WAQ to change the Ename from Anny to Robin.
- 3. Delete any one record from table.
- 4. Add a new column in the employee table with name "email id" having datatype varchar2(15).
- 5. WAQ to display the entire table using DQL Command .
- 6. WAQ to display the specific records whose age is greater then 30 using where clause.
- 7. Display only the city column using where clause.
- 8. Display the name of employee whose name starts with "J" using predicate.
- 9. WAQ to find the name of the employees whose salary lies between 24000.00 to 28000.00
- 10. WAQ to list the number of employees whose name is not "Jenny","Mary","Ford".

St.Aloysius' College Autonomous Jabalpur						
PartA: Introduction						
Pro	gram: Diploma		Class : B.Com	Sem:- IV	session:2023- 2024	
Su	bject :	Computer Appli	cation			
1.	Course Code	S2-COAP2T	SD NET & C#			
۷.	Course The	Introduction to A.	SP.NET& C#			
3.	Course Type	Elective				
4.	Pre-requisite					
5.	Course	On the completie	on of this cours	se student will b	e able-	
	Learning Out	• To learn fund	amentals of. ne	et framework		
	comes(CLO)	• To enrich kno	owledge about '	Windows Forms	s, Controls and	
		ASP.NET ba	sed application	IS.		
		To gain profic	ciency in C# by	building stand-a	lone applications in the	
		NET framew	ork using C#.			
		• To build data	-driven applica	tions using the .	NET Framework, C#,	
		and ADO.NE	T			
		• To acquire sk	skills to create web-based applications and Reports			
		Using.net tec	hnologies			
6.Credit ValueI neory:- 37Total MarksMax Marks:		Max Marks 404	-60	Min PassingM	arks:35	
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	Part B:Contents of the Course					
		Introductior	n to ASP.NET&	zC#		
	Total	No.ofLectures =4	5(3 hours/ lect	ure per week)		
	nit	Topics			No. of Lectures	
1	Introduction to .N	ET Framework:	Programming	Platform .NET		
	Framework, .NET A	rchitecture, CLR, th	e Just-in-Time	Compiler,		
	C# - The Basics and	Console Applicati	ons in C#: Intr	oduction to C#.	2	
Visual development & event driven Programming Methods and			1			
	events. Data type, type conversion. Variables constants, operators,					
Decision making, Loops, Arrays.			11			
11	Overview of OO	Ps: Class, Objec	t, Encapsulatio	on, inheritance	, 11	
polymorphism, abstraction, Understanding Constructors and						
instance variables Handling and Using Interfaces. Preprocessor			•			
	directives, Exception handling, Understanding Delegates in c#.					
	Windows Forms	and Controls: 7	The Windows	Forms Model	,	
	Creating Windows	Forms, Windows	Forms Propert	ties and Events	,	
	Windows Form Con	trols, Menus - Dia	logs - ToolTip	0 \$.		

III In U: ,so	IIIIntroduction to ASP.NET:- ASP.NET Life Cycle, page life cycle phases, Understanding ASP.NET Controls, Web forms, Web form controls , server controls, client controls, HTML controls ,Navigation controls.					
IV. Se Ev Ri R	IV. Session Management :- Event Handling- Application and Session Events, Page and Control Events. Validation controls: RequiredFieldvalidator, RangeValidator, CompareValidator RegularExpressionValidator, CustomValidator, ValidationSummary					
D C C	Database connectivity in ASP.NET: Architecture of ADO.NET, Connection Class, Command Class, Data Adapter Class, and Dataset Class, Display data on web form using Data bound controls.					
	Part C:Learning Resources					
5	SuggestedDigitalPlatforms;Weblinks					
	1. <u>https://docs.microsoft.com/en-us/dotnet/framework/eet-</u> <u>started/system-requirements</u>					
	2. <u>https://www.c-sharpcorner.com/UploadFile/18585c/overview-of-</u>					
	 <u>design-pattern-dotnet</u> <u>http://www.mphindieranthacademy.orq•/</u> 					
	SuggiestedReadings:					
	1. ASP .NET Unleashed C# programming — Wrox Publication.					
	 C# Programming Black Book by MattTalles. VB.NET Programming Black Book by st.evenholzner —dreamteef 					
	publications 4 Mastering VB NET by Evangelos petroutsos- BPB publications					
	5. Introduction to .NET framework-Worx publication					
	6. Books published by M.P. Hindi Granth Academy, Bhopal					
	Part D-Assessment and-Evaluation					

Suggested Continuous Evaluation Methods: Maximum Marks : '100

Continuous Comprehensive Evaluation (CCE): 40 marks University Exam (UE):

60 marks Internal Assessment : Class TestTotal 40				
Continuous Comprehensive	Assignment/Presentation			
Evaluation (CCE):40				
External Assessment :	Section(A) : Objective Questions	Total 60		
University Exam Section: 60	Section (B) : Short Questions			
Time: 03.00 Hours	Section (C) : Long Questions			

	PartA: Introduction					
Pro	ogram: Diploma	Class : B.Com Sem :- IV session:2023-2024				
	- - - - -	Subject: Computer Application				
1.	CourseCode	S2-COAP2P				
2.	CourseTitle	Introduction to ASP.NET & C# (Practical)				
3.	Course Type	Elective				
4.	Pre-requisite					
5.	Course Learning Out comes(CLO)	 On the completion of this course student will be able- To learn fundamentals of. net framework To enrich knowledge about Windows Forms, Controls and ASP.NET based applications. To gain proficiency in C# by building stand-alone applications in the .NET framework using C#. To build data-driven applications using the .NET Framework, C#, and ADO.NET To acquire skills to create web-based applications and reports using.NET technologies 				
6.	Credit Value	1				
7.	Total Marks	Max.Marks: 40+60 Min. Passing Marks: 35				
	Part B: Contents of the Course Introduction to ASP.NET & C# (Practical) Total No. of Practical =30 (each of 2 hours duration (1 Practical per week))					
List	Practical will be conducted based on the theory Syllabus					
	 Develop a console application in c# to find the addition of two numbers. Develop a console application in c# to find the simple interest. Develop a console application in c# to find the factorial of any n entered number. Develop a console application in c# to display a fibonacci series. Develop a console application in c# to check whether a number is even or odd. 					
	 Develop a console application in c# to implement array. Develop a console application in c# to find the product, and division of entered 					

- 7. Develop a console application in c# to find the product and division of entered number.
- 8. Write a program to declare a class "staff" having data of the members such as name and post. Accept this data and display the result.
- 9. Define a class having "salary" of members displaying variables such as BASIC, DA, HRA. Develop a window application to find the total salary of the employee.
- 10. Develop a window application using text box, check box, radio button, list box, labels and validation.
- 11. Develop a ASP.NET dynamic website for student registration detail.