

**St. Aloysius' College (Autonomous), Jabalpur****Semester II****Part A – Introduction**

<b>Session:</b>	2023-24
<b>Subject/ विषय:</b>	Computer Application
<b>Programme/ कार्यक्रम:</b>	Certificate / सर्टिफिकेट
<b>Class/ कक्षा:</b>	BA II Semester
<b>Course Code/ पाठ्यक्रम कोड:</b>	<b>C1-COMC1T</b>
<b>Course Type/ पाठ्यक्रम का प्रकार:</b>	OPEN ELECTIVE
<b>Course Title/पाठ्यक्रम का शीर्षक:</b>	Basics of Programming Methodology and Database
<b>Pre-requisite/ पूर्वसंप्रेक्षा:</b>	OPEN FOR ALL
<b>Course Learning Outcome/ पाठ्यक्रम अध्ययन की परलवधियां:</b>	After completion of this course, it is expected that the student shall be able CO1- To understand the basic concepts of computer programming CO2: to understand the concept of functions and arrays CO3- To understand the concept of database CO4-To understand the basic concepts of MS-Access CO5:To develop the concept of form designing and report designing using MS-Access
<b>Credit Value/ क्रेडिट मान:</b>	4 credits
<b>Total Marks/ कुल अंक:</b>	Max. Marks: (internal) + (external)

**Part B – Course Content**

<b>Unit I</b>	MS Access: Concepts & terms : database tables, relational database, records, fields , controls & objects , queries forms, reports , properties , wizards , macros , Creating database & tables with & without wizard, data types & properties, adding & deleting fields, primary key field & indexing fields.
<b>Unit II</b>	MS Access Form: Form wizard , Saving & Modifying forms Entering & Editing data , Finding , sorting & displaying data creating queries , using select queries and wild cards.MS Reports: Creating reports, Previewing reports, Printing reports, modifying & Saving reports. Expressions, Create Pivot Table or Pivot Chart views in an Access desktop database.
<b>Unit III</b>	Introduction to Programming and Characteristics. Stages in Program Development.

	Algorithms, Flowcharts, Types of Programming, Introduction to C Programming -		
	Basic Program Structure, Data Types, Variables, Constants, Operators, Keywords. Data types in C(int, float and char).		
<b>Unit IV</b>	Control statements in C , Arrays - Declaration and Execution, Syntax, one dimensional array, Functions Pre-defined and User Defined Functions, Structure.		
<b>Part C – Suggested Readings</b>			
S. No.	Author	Name of the Book	Publication
1.	Gini Courter,Annette Marquis.	Microsoft Office 2000	B.P.B. Publications
2.	Saxena Sanjay,S Schnd	Microsoft Office 2000 for everyone	Vikas Publishing
3.	Michael Alexender, Richard Kusleika	Access 2016 Bible	Wiley
4.	Greg Harvey	Excel 2019	For Dummies
5	S.S. Bhatia	Programming in C	PHI Publication
<b>Part D: Assessment &amp; Evaluation</b>			
Suggested Continuous Evaluation Method(Theory and Practical) Maximum Marks: 100 Continuous Comprehensive Evaluation (CCE): 40 <b>Marks</b> External Exam: 60 <b>Marks</b>			

### **List of practical**

Create database named “Student”, create table name “Student\_details”. Insert 10 rows and find all the students whose marks are greater than 60%.

1. Create sql query to sort the above data in ascending order.
2. Design a form using form wizard and update the database.
- 3.Design a form using design view and update the records.
- 4.Design a report on above said database and implement the mathematical functions.
- 5.Write a program in C to find simple interest using arithmetic operators.
- 6.Write a program in C to implement decision control statements.
- 7.Write a program to find factorial using loop.

8. a program to implement array.

9Write a program to create user defined functions.

10.Write a program to implement structures.