

APPENDIX-AI (Three Years Six Semesters Degree Programme) (Choice Based Credit System) Examinations leading to the Degree of Bachelor of Science

Scheme of Teaching, Learning, Examination and Evaluation (B.Sc. Part-I) (Semester-I) Computer Science/CA(Voc-Non Voc)/IT																	
Sr. No	Subject	Subject Code	Teaching & Learning Scheme							Duration of Exams in Hrs	Examination & Evaluation Scheme						
			Teaching Period Per week				Credits				Maximum Marks					Minimum Passing	
			L	T	P	Total	Theory/ Tutorial	Practical	Total		Theory+ MCQ Ext	Skill Enhancement Module (SEM) Int.	Practical		Total Marks	Marks	Grade
Internal		External															
1	DSC-1: Fundamentals of Computer & C	CS1	6	-	-	6	4.5	-	4.5	3	80	20	-	-	100	40	P
2	DSC-2: Practical for C programming	CSP1	-	-	6	6	-	2.25	2.25	3	-	-	25	25	50	25	P

Scheme of Teaching, Learning, Examination and Evaluation (B.Sc. Part-I) (Semester-II) Computer Science/CA(Voc-Non Voc)/IT																	
Sr. No	Subject	Subject Code	Teaching & Learning Scheme							Duration of Exams in Hrs	Examination & Evaluation Scheme						
			Teaching Period Per week				Credits				Maximum Marks					Minimum Passing	
			L	T	P	Total	Theory/ Tutorial	Practical	Total		Theory+ MCQ Ext	Skill Enhancement Module (SEM) Int.	Practical		Total Marks	Marks	Grade
Internal		External															
3	DSC-3 Data Structure and CPP	CS2	6	-	-	6	4.5	-	4.5	3	80	20	-	-	100	40	P
4	DSC-4 Practical On DS And CPP	CSP2	-	-	6	6	-	2.25	2.25	3	-	-	25	25	50	25	P

Scheme of Teaching, Learning, Examination and Evaluation (B.Sc. Part-II) (Semester-III) Computer Science/CA(Voc-Non Voc)/IT

Sr. No	Subject	Subject Code	Teaching & Learning Scheme							Duration of Exams in Hrs	Examination & Evaluation Scheme						
			Teaching Period Per week				Credits				Maximum Marks				Minimum Passing		
			L	T	P	Total	Theory/Tutorial	Practical	Total		Theory+MCQ Ext	Skill Enhancement Module (SEM) Int.	Practical		Total Marks	Marks	Grade
		Internal	External														
5	DSC-5 Networking and Web Technologies	CS3	6	-	-	6	4.5	-	4.5	3	80	20	-	-	100	40	P
6	DSC-6 Practical Web Technologies	CSP3	-	-	6	6	-	2.25	2.25	3	-	-	25	25	50	25	P

Scheme of Teaching, Learning, Examination and Evaluation (B.Sc. Part-II) (Semester-IV) Computer Science/CA(Voc-Non Voc)/IT

Sr. No	Subject	Subject Code	Teaching & Learning Scheme							Duration of Exams in Hrs	Examination & Evaluation Scheme						
			Teaching Period Per week				Credits				Maximum Marks				Minimum Passing		
			L	T	P	Total	Theory/Tutorial	Practical	Total		Theory+MCQ Ext	Skill Enhancement Module (SEM) Int.	Practical		Total Marks	Marks	Grade
		Internal	External														
7	DSC-7 RDBMS and Core Java	CS4								3							
8	DSC-8 Practical on RDBMS and Core Java	CSP4	--	-----	6	6	-----			3			25	25	50	25	p
9	Open Elective Course (Optional)		GIC/MOOC/Skill course														

Scheme of Teaching, Learning, Examination and Evaluation (B.Sc. Part-III) (Semester-V) Information Technology

Sr. No	Subject	Subject Code	Teaching & Learning Scheme							Duration of Exams in Hrs	Examination & Evaluation Scheme						
			Teaching Period Per week				Credits				Maximum Marks					Minimum Passing	
			L	T	P	Total	Theory/Tutorial	Practical	Total		Theory+MCQ Ext	Skill Enhancement Module (SEM) Int.	Practical		Total Marks	Marks	Grade
		Internal		External													
10	DSC-9 PHP Programming	IT5	6		-	6		-		3	60+20	20	-	-	100	40	p
11	DSC-10 Practical on PHP Programming	IT5P			6	6		-		3			25	25	50	25	p
12	Open Elective Course (Optional)		GIC/MOOC/Skill course														

Scheme of Teaching, Learning, Examination and Evaluation (B.Sc. Part-III) (Semester-VI) Information Technology

Sr. No	Subject	Subject Code	Teaching & Learning Scheme							Duration of Exams in Hrs	Examination & Evaluation Scheme						
			Teaching Period Per week				Credits				Maximum Marks					Minimum Passing	
			L	T	P	Total	Theory/Tutorial	Practical	Total		Theory+MCQ Ext	Skill Enhancement Module (SEM) Int.	Practical		Total Marks	Marks	Grade
													Internal	External			
13	DSE-I (1) Cyber Security	ITE1	6		-	6	4.5	-	4.5	3	60+20	20	-	-	100	40	p
14	DSE-I (2) C# Programmiing	ITE2	6		-	6	4.5	-	4.5	3	60+20	20	-	-	100	40	p
15	DSE-II (1) Practical on Cyber Security	ITEP1			6	6		2.25	2.25	3			25	25	50	25	p
16	DSE-II (2) Practical on C# Programmiing	ITEP2			6	6		2.25	2.25	3			25	25	50	25	p
17	Project / dissertation if applicable				2	2		1	1		-	-					P
18	(AEC) on DSC if applicable			1		1	1	--	1	1	--		25	-	25	10	P
19	Open Elective Course (Optional)		GIC/MOOC/Skill course														

Note: Studentss shall opt one of the DSE-I (1) and DSE-I (2) papers and its related practical (either DSE-II (1) and DSE-II (2))

Sant Gadge Baba Amravati University, Amravati

Faculty of Science and Technology

Part B

Faculty: Science

Syllabus Prescribed for the Year 2024-25

UG Programme: B.Sc. Part III (Information Technology)

Semester V

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
IT5	PHP Programming	72

Cos: On completion of course, the students will be able to

1. To develop the basic skills of web programming.
2. To provide knowledge to create dynamic web page.
3. To improve the skills for fast development of web application.
4. To provide knowledge about database and communication between database & web application
5. To introduce Fundamentals of PHP programming.
6. To understand Setting Cookies with PHP, proper use of Cookies concept with web application.

Unit	Content
Unit I	Introduction: Evolution of PHP, Features of PHP, Server Introduction of PHP, Installation & Configuration of PHP, PHP Ethics Fundamentals of PHP: Keywords in PHP, Variables (Predefined, User defined), Constants, data types in PHP. (12 Periods)
Unit II	Operators: Arithmetic/math operators, Assignment Operators, Comparison Operators, Logical Operators, Bitwise Operators, String Operator Control Structures: if, if-else, if-else-if, Loops in PHP: while, do-while, for loops (12 Periods)
Unit III	Introduction to arrays: Definition, Declaration of array, Types of array: Numeric array, Associative array, Multidimensional Array, Array Functions: print_r(), explode(), implode(), array_merge(), array_sum(), array_search(), array_push(), array_pop() (11 Periods)
Unit IV	Functions in PHP: Introduction to Functions in PHP, Function declaration, Function calling, Predefined functions in PHP: crypt(), move_uploaded_file(), isset(), empty(), include(), require() (11 Periods)
Unit V	String Handling: Introduction to strings in PHP, Manipulation of strings: Concatenation Operator for string, strlen(), strtolower(), substr(), strpos() Date Function and Math Functions (11 Periods)
Unit VI	Cookies: Anatomy, Setting Cookies with PHP, Accessing Cookies, Deleting Cookies, Session: Starting PHP session, Destroying PHP Session, Sessions without Cookies, Error Handling, Sending Emails. (11 Periods)
*SEM: Assignment, Class test, Seminar, Study tour, Industrial visit, Field work, Group discussion or any other innovative practice/activity	
Course Outcomes: <ol style="list-style-type: none"> 1. Ability to develop Web application with PHP. 2. Ability to use the Cookies concept with web application properly 3. Knowledge of Web Programming with database connectivity 	
**Activities	<ol style="list-style-type: none"> 1. Write PHP scripts to handle HTML forms. 2. Write regular expressions including modifiers, operators in PHP programming. 3. Create PHP programs that use various PHP library functions. 4. Web application tasks by writing PHP programs. (04 Periods)

Course Material/Learning Resources

Text books:

1. The Complete Reference PHP
2. Learning PHP, My SQL & Java Script by Robin Nicson (O'really)
3. PHP for Web: Visual Quickstart Guide by Larry Ullman
4. PHP & My SQL Web Development by A. Martin, S. Mathews

Reference Books:

1. "Beginning PHP, Apache, MySQL Web development" by Michael K. Glass, Yann Le Scouarnec, Elizabeth Naramore, Gary Mailer, Jeremy Stolz, Jason Gerner, Wrox Publication
2. "Professional LAMP: Linux, apache, MySQLand PHP5 Web development " by Jason Gerner, Elizabeth Naramore, Morgan L. Owens, Matt Warden, Wrox Publication
3. "PHP5 and Mysql Bible " by Tim Converse, Joyce Park, Wiley publication
4. "Head first PHP and Mysql, Second Edition" by Lynn Beighley, Michael Morrison, Oreilly publication
5. "PHP and MYSQL Web Development " by Luke Weling, Laura Thomas, Pearson Education.

Weblink to Equivalent MOOC on SWAYAM if relevant:

1. https://onlinecourses.swayam2.ac.in/aic20_sp32/preview
2. <https://ciet.nic.in/swayam-moocs.php>

Weblink to Equivalent Virtual Lab if relevant:

1. http://vlabs.iitb.ac.in/vlabs-dev/labs/phplab_17062019/labs/exp1/theory.php
2. http://vlabs.iitb.ac.in/vlabs-dev/labs/phplab_17062019/labs/exp1/simulation.php

Any pertinent media (recorded lectures, YouTube, etc.) if relevant:

- https://spoken-tutorial.org/tutorial-search/?search_foss=PHP+and+MySQL&search_language=English
- https://www.youtube.com/watch?v=OK_JCtrrv-c
- <https://www.youtube.com/watch?v=yXzWfZ4N4xU>
- <https://www.youtube.com/watch?v=2eebptXfEvw>
- <https://www.youtube.com/watch?v=qVU3V0A05k8>
- https://www.youtube.com/watch?v=6EukZDFE_Zg

Sant Gadge Baba Amravati University, Amravati
Faculty of Science and Technology
Syllabus Prescribed for B.Sc.-III Year UG Programme
Programme: B.Sc. (Information Technology)

Semester: V

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
IITP5	Laboratory/Practical on PHP Programming	(06 periods per Batch per Week)

Course Objectives: After completion of this course student will be able to:

1. Implement Server-side programming.
2. Develop dynamic software components.
3. Develop database application.
4. To develop Web application with PHP.
5. To understand Setting Cookies with PHP, proper use of Cookies concept with web application.

*** List of Practical/Laboratory Experiments/Activities etc.**

Sr. No.	Name of Experiment/Practical
1	Implementation of various operators used in PHP.
2	Implementation of if-else used in PHP
3	Implementation of if-else-if in PHP
4	Implementation of for loop in PHP
5	Implementation of while loop in PHP
6	Implementation of do-while loop in PHP
7	Implementation of for-each loop in PHP
8	Implementation of function in PHP
9	Implementation of Numeric array in PHP
10	Implementation of Associative array in PHP
11	Implementation of Multidimensional Array in PHP
12	Implementation of string handling in PHP
13	Implementation of GET method with HTML Forms in PHP
14	Implementation of POST method with HTML Forms in PHP
15	Implementation of Sessions in PHP
16	Implementation of Cookies in PHP
17	Implementation of Error Handling in PHP
18	Implementation of File Handling in PHP
19	Implementation of database connection in PHP
20	Implementation of mysql_query() in PHP

Distribution of Marks for Practical Examination

Time: 4 hours (One Day Examination) Marks: 50

Exercise-I:	15
Exercise-II;	15
Viva-Voce:	10
Record:	10
Total:	50

Sant Gadge Baba Amravati University, Amravati
Faculty of Science and Technology
Part B
Faculty: Science and Technology
Syllabus Prescribed for the Year 2024-25
UG Programme: B.Sc. Part III (Information Technology)
Semester VI

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
ITE1	Cyber Security	72

COs:

On completion of course, the students will be able to

1. Understand the broad set of technical, social & political aspects of Cyber Security
2. Analyze the vulnerabilities and threats posed by criminals, terrorist and nation/states to national infrastructure
3. Understand the importance of ethical hacking tool
4. Understanding the ethical hacking process
5. Implementing ethical hacking tools in an organization
6. Apply security principles to system design
7. Apply methods for authentication, access control, intrusion detection and prevention and conduct research in Cyber Security

Unit	Content
Unit I	Introduction to Cyber Security: Importance and challenges in Cyber Security, Cyberspace, Cyber threats, Cyber warfare, CIA Triad, Cyber Terrorism, Cyber Security of Critical Infrastructure, Cyber security, Organizational Implications. (12 Periods)
Unit II	Hackers And Cyber Crimes: Types of Hackers, Hackers and Crackers, Cyber-Attacks and Vulnerabilities, Malware threats, Sniffing, Gaining Access, Escalating Privileges, Executing Applications, Hiding Files, Covering Tracks, Worms, Trojans, Viruses, Backdoors (12 Periods)
Unit III	Ethical Hacking: Concept and Scope, Threats and Attack Vectors, Information Assurance, Threat Modeling, Enterprise Information Security Architecture, Vulnerability Assessment and Penetration Testing (11 Periods)
Unit IV	Cyber Forensics And Auditing: Introduction to Cyber Forensics, Computer Equipment and associated storage media Forensics Investigation Process: Role of forensics Investigator, Collecting network based evidence, Writing Computer Forensics Reports (11 Periods)
Unit V	Social Engineering and Cyber Auditing: Types of Social Engineering, Insider Attack, Preventing Insider Threats, Social Engineering Targets and Defense Strategies Cyber Auditing: Plan an audit against a set of audit criteria, Information Security Management, System Management. Introduction to ISO 27001:2013 (11 Periods)
Unit VI	Cyber Ethics And Laws : Introduction to Cyber Laws, E-Commerce and E-Governance, Certifying Authority and Controller: Offences under IT Act- Computer Offences and its penalty under IT Act 2000, Intellectual Property Rights in Cyberspace (11 Periods)
*SEM: Assignment, Class test, Seminar, Study tour, Industrial visit, Field work, Group discussion or any other innovative practice/activity	
**Activities	1. Assignments 2. Hands on Training (04 Periods)

Course Material/Learning Resources

Text books:

1. "Cyber Security Operations Handbook", John W Ritting House, William M.Hancock, Read Elsevier 2008.
2. "Cyber Security" by Nina Godbole & Sunit Belapure
3. "Computer Forensics" by Marie - Helen Maras

Reference Books:

1. "Artificial Intelligence: A Modern Approach, 3rd Edition", by Stuart Russell and Peter Norvig

2. "Cyber Security Essentials" by James Graham, Richar Howard, Ryan Olson, , CRC Press, Tailor and Francis Group
3. "Cyber Security Understanding Cyber Crimes, Computer Forensics and Legal Perspectives" by Nina Godbole, Sunit Belapur, Wiley India Publications
4. "Computer Security" by Dieter Gollmann, Wiley Publication, Third Edition
5. Cyber Security and Cyber war: What Everyone Needs to Know, by Allan Friedman and P. W. Singer, Oxford University.
6. Cyber Security Basics: Protect Your Organization by Applying the Fundamentals by Don Franke, Publisher: CreateSpace Independent Publishing Platform, 2016
7. Fundamental of Cyber Security by Mayank Bhushan,

Web links to Equivalent MOOC on SWAYAM if relevant:

1. https://onlinecourses.swayam2.ac.in/cec20_cs15/preview
2. <https://www.classcentral.com/course/swayam-cyber-security-13978>
3. <https://programs.online/top-technology-courses/p/swayam/introduction-to-cyber-security-online>

Web links to Equivalent Virtual Lab if relevant:

1. <https://www.vlab.co.in/>
2. <https://virtualcyberlabs.com/>

Any pertinent media (recorded lectures, YouTube, etc.) if relevant:

1. <https://www.youtube.com/watch?v=VBejkJSsHZ0>
2. https://www.youtube.com/watch?v=b4-ZZb_4Zr4
3. <https://www.youtube.com/watch?v=GT0daScxO1>

Sant Gadge Baba Amravati University, Amravati
Faculty of Science and Technology
Part B
Faculty: Science
Syllabus Prescribed for the Year 2024-25
UG Programme: B.Sc. Part III (Information Technology)
Semester VI

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
ITE2	C# Programming	72

Cos: On completion of course, the students will be able to

1. To learn basic programming in C# and the object-oriented programming concepts.
2. Write various applications using C# Language in the .NET Framework.
3. Develop deep understanding of C# language features.
4. Build strong concepts of OOP's and implement the same in C#.
5. Create and manage strings, arrays, collections and enumerators using .NET framework library.

Unit	Content
Unit I	.Net Architecture – Core C#: Introduction to C#, C# evolution and versions, History, Origins of .Net technology, .Net framework, Benefits of .Net, C# environment (12 Periods)
Unit II	Understanding .Net: The Common Language Runtime, Framework Base Classes, User and Program interfaces, Visual Studio.net, .Net languages C# and .net: Variables, Data Types, Flow controls, Namespaces, Comments, Aliases for namespaces, Command-line arguments, Strings and Regular Expressions (12 Periods)
Unit III	C# Flow Control: Decision making and branching, Looping, Methods in C#, Array handling, String manipulation, Structures and Enumerations Introduction to OOPS: Objects and Types, Classes and Structures, Generics: Arrays and Tuples, Operators and Casts, Indexers, Encapsulation and Data Abstraction, Access modifiers, Constructors, Destructors, Nesting of classes. (11 Periods)
Unit IV	Inheritance and Polymorphism: Multilevel inheritance, Hierarchical inheritance, Hiding methods, Abstract methods and classes Interfaces: Defining, Extending and Implementing interfaces, Inheritance implementation, Abstract class and Interfaces (11 Periods)
Unit V	Operator overloading: Unary, Binary, Comparison, Delegates and events Console I/O operations: Console Class, Console Input Output, Formatted output. (11 Periods)
Unit VI	Errors and Exceptions: Types of errors, Exceptions, Exception handling codes, Multiple catch statements, Exception hierarchy, Catch handler, finally statement, Nested try blocks. (11 Periods)
*SEM: Assignment, Class test, Seminar, Study tour, Industrial visit, Field work, Group discussion or any other innovative practice/activity	
Course Outcomes: 1. To learn basic programming in C# and the object-oriented programming concepts. 2. Write various applications using C# Language in the .NET Framework.	
**Activities	1. Create mobile applications using .NET compact Framework. (4 Periods)

Course Material/Learning Resources

Text books:

1. "Professional C# 2012 and .NET 4.5" by Christian Nagel, Bill Evjen, Jay Glynn, Karli Watson, Morgan Skinner. Wiley, 2012
2. "Programming in C#" by Harsh Bhasin, Oxford University Press, 2014.

Reference Books:

1. "Pro C# 5.0 and the .NET 4.5 Framework", by Andrew Troelsen, A press publication, 2012.
2. Programming in C# by E. Balagurusamy, Tata McGraw-Hill Publications
3. Programming C# by J. Liberty, O'Reilly Publications

4. "Programming C# 4.0 - Fourth Edition" by Ian Gariffiths, Mathew Adams, Jesse Liberty, OReilly, 2010.
5. "The Complete Reference: C#" by Herbert Schildt, Tata McGraw-Hill Publications
6. "C# and the .NET Platform" by Andrew Troelsen, A! Press

Weblink to Equivalent MOOC on SWAYAM if relevant:

1. <https://www.mooc-list.com/course/c-class-development-coursera-0>
2. <https://www.my-mooc.com/en/mooc/programming-c-microsoft-dev204x-2/>

Weblink to Equivalent Virtual Lab if relevant:

1. <https://www.studocu.com/in/document/gujarat-technological-university/dotnet-technology/dot-net-technology-2160711-lab-manua-l/18844468>

Any pertinent media (recorded lectures, YouTube, etc.) if relevant:

1. [C# docs - get started, tutorials, reference. | Microsoft Docs](#)
2. [C# Tutorial \(C Sharp\) \(w3schools.com\)](#)
3. <https://youtu.be/MhdxhUgSpFw>
4. <https://youtu.be/daFdTssjm3w>

Sant Gadge Baba Amravati University, Amravati
Faculty of Science and Technology
Syllabus Prescribed for B.Sc.-III Year UG Programme
Programme: B.Sc. (Information Technology)

Semester: VI

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
ITEP1	Practical on Cyber Security	(06 periods per Batch per Week)

Course Objectives: After completion of this course student will be able to:

- To provide the fundamentals mid essentials and foundation of Cyber Security.
- Enable to explore some important Cyber Security driven commercial systems and applications.
- To provide essentials of Cyber Security architecture, Virtualization, storage and Network concepts.
- Describe the fundamental concept, architecture and applications of Cyber Security.
- To Discuss the problems related to Cyber Security model and examine the concept of virtualization.

*** List of Practical/Laboratory Experiments/Activities etc.**

Sr. No.	Name of Programs/ Experiment
1	CIA Triad Analysis: Use virtualization software like VirtualBox or VMware to set up a virtual environment and demonstrate how different security measures (confidentiality, integrity, availability) can be implemented and tested.
2	Penetration Testing with Kali Linux: Students can learn ethical hacking techniques by using tools available in Kali Linux to perform penetration tests on a simulated network environment.
3	Malware Analysis with REMnux: Install REMnux, a Linux distribution designed for malware analysis, and analyze malware samples in a controlled environment to understand their behavior and characteristics.
4	Digital Forensics with Autopsy: Utilize Autopsy, an open-source digital forensics platform, to investigate digital evidence, including file system analysis, keyword searching, and timeline analysis.
5	Wireshark Packet Analysis: Students can capture network traffic using Wireshark and analyze packet data to identify potential security threats, such as unauthorized access or malicious activity.
6	Social Engineering Toolkit (SET): Explore the Social Engineering Toolkit (SET) in Kali Linux to understand and simulate social engineering attacks, such as phishing and credential harvesting.
7	ISO 27001 Compliance Assessment: Use GRC (governance, risk management, and compliance) software tools to assess compliance with ISO 27001 standards and develop an audit plan for an organization's information security management system.
8	Legal Compliance Check with Nmap: Use Nmap, a network scanning tool, to perform security audits and assess legal compliance by identifying open ports, services, and potential vulnerabilities on network devices.
9	Malware Sandbox Analysis: Utilize malware sandboxing tools like Cuckoo Sandbox or Hybrid Analysis to analyze and execute suspicious files in a controlled environment, observing their behavior and potential impact.
10	Cyber Incident Response with Splunk: Set up a Splunk instance to collect and analyze log data from various sources, allowing students to practice cyber incident response and threat hunting techniques in a simulated environment.

Distribution of Marks for Practical Examination

Time: 4 hours (One Day Examination) Marks: 50

Exercise-I:	15
Exercise-II:	15
Viva-Voce:	10
Record:	10
Total:	50

Sant Gadge Baba Amravati University, Amravati

Part B

Syllabus Prescribed for the Year 2024-25

UG Programme: B.Sc. Part III (Information Technology)

Semester VI

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
ITEP2	Practical of C# Programming	(06 periods per Batch per Week)

Course Name: C# Programming

COs

1. Display proficiency in C# by building stand-alone applications in the .NET framework using C#.
2. Create distributed data-driven applications using the .NET Framework.
3. To implement different types of inheritances and operator overloading concepts using C#.
4. To implement exception handling with c#.

* List of Practical/Laboratory Experiments/Activities etc.

Sr.No.	Name of Program/ Experiment
1	Write C# Program to Swap Values of Two Variables.
2	Write C# program to calculate the total marks, percentage and division of student.
3	Write C# program to print multiplication table of a given number
4	Write C# program to print sum of digits enter by user
5	Write C# program to find sum of even numbers between 1 to
6	Write C# program to print all natural numbers in reverse order
7	Write C# program to find sum of odd numbers between 1 to n
8	Write C# program to swap first and last digit of a number
9	Write C# program to find first and last digit of any number
10	Write C# program to calculate power using while & for loop
11	Write C# program to find factorial of any number
12	Write C# program to count even and odd elements in an array
13	Write C# program to insert an element in array of a given number
14	Write a C# program to create a function to check whether a number is prime or not
15	Write a C# program to create a function to display the n number Fibonacci sequence
16	Write a C# program to sort a string array in ascending order
17	Write a C# program for Inheritance.
18	Write a C# program for Multiple inheritance.
19	Write a C# program for polymorphism.
20	Write a C# program for operator overloading.

Weblink to Equivalent Virtual Lab if relevant:

1. <https://www.studocu.com/in/document/gujarat-technological-university/dotnet-technology/dot-net-technology-2160711-lab-manua-l/18844468>

Distribution of Marks for Practical Examination

Time: 4 hours (One Day Examination) Marks: 50

Exercise-I15

Exercise-II..... 15

Viva-Voce..... 10

Record.....10

Total: 50