Some content on IECT and E-Governance

Course Code	Course Title	Group	Course Category	Credit	C.I.A. (Continouns Internal Assesment)	Theory & Practical	Total
BOA 111	Information Technology (FUNDANMENTALS OF IT & APPLICATION SOFTWARE– I)	C	Core Course (CC)	4	30	50+20	100

Semester I

Objective:

1. This paper is intended to be the first basic course for the students of Information Technology. The main objectives of this course are;
2. It will expose the students to the fundamentals of the IT
3. Students will be having the introductory knowledge of the MS-Windows
4. Practically students will be able to use MS-PowerPoint and MS-Word.

Course Contents:

Unit I: Introduction to Computers

Introduction

- Application of Computers
- Block diagram of computer
- Types of computers and features
- Mini Computers
- Micro Computers
- Mainframe Computers
- Super Computers

Data Organization

- Drives
- Files
- Directories/Folder

Types of Memory (Primary And Secondary)

- RAM
- ROM
- PROM
- EPROM
- Secondary Storage Devices (FD, CD,DVD, HD,Pen drive)

Unit II

Devices

- Input Devices – Keyboard, Mouse, Joystick, Trackball, Light Pen, Touch Screen, Scanner, Digitizer, OMR, OCR ,MICR, Bar Code Reader
- Output Devices - Monitor, Printers, Plotter

Types of Software- Application & System Software

Language Processors- Assembler, Compiler & Interpreter

Types of Programming Languages

- Machine Languages
- Assembly Languages
- High Level Languages

Operating System

- Functions of Operating System
- Types of Operating System

Unit III

Introduction to MS-Windows

- Features of Windows
- Basic Components of Windows operating system-Start button, Desk Top
- My Computer, Recycle bin, Task Bar, Icons & System Tray
- Control Panel
- File and Folder Management

Concept of Word processor and its application

Ms-Word

- Ms-Word Window Layout
- Creating and Formatting Documents
- Editing Documents
- Creating and Editing Tables
- Mail Merge
- Printing Documents

Unit IV

Introduction & Application of MS-Powerpoint

- Power Point Slide Creation
- Slide Layout
- Views
- Adding content to slide- Text, Graphics, Sound, Video
- Applying Slide Transition
- Custom Animation
- Slide Show

Outcome:

- Students will apply the knowledge of IT practically in their day to day life.
- Students will be able to work on computers comfortably.
- Students will be able to create well formatted documents and attractive presentations.

Reference Books/Website

1. http://www.tutorialspoint.com/computer_fundamentals/index.htm
2. http://www.gcflearnfree.org/office
3. Rapidex computer course by Pustak Mahal Editorial Board, Unicorn Books,2012
4. Fundamentals of computers (English) Ist Edition by Reema Thareja, Oxford University Press, 2014

Practical:

- General use of Windows Operating System
- Creating document in MS-Word like Advertisement, Letter, Tables, Mail Merge etc

- Creating presentations in power point.

Highlighted Unit Removed and Unit on Cyber Security added

Course Code	Course Title	Group	Course Category	Credit	C.I.A. (Continouns Internal Assesment)	Theory & Practical	Total
BOA 211	Information Technology (FUNDANMENTALS OF IT & APPLICATION SOFTWARE – II)	C	Core Course (CC)	4	30	50+20	100

Semester II

Objective:

This paper is intended to be the first basic course for the students of Information Technology. The main objectives of this course are;

- Students will be exposed to networking concepts including internet.
- Students will be exposed to work on numbers including formulas using MS-Excel.
- Students will be able to create and edit videos using Windows movie maker.

UNIT I

Computer & Communications

Need of data transmission/ communications

Networking Concepts

- Types of Networks – LAN, WAN, MAN & PAN - Need
- Topologies- Star, Ring, Bus, Tree ,Hybrid
- Advantages and Limitations

Internet

- Internet: Introduction
- Server and Client
- Web Browsers-Its functions

• Concept of Search Engines,

• Search engines types

• Websites – Types (Dynamic & Static)

• Internet Vs Intranet

Unit II

Types of Internet Services

• World Wide Web

• Telnet

• Electronic Mail

• Chat

• Newsgroups

E-Mail:

• Concepts

• Basics of Sending & Receiving

Unit III

Windows Movie Maker 7

• Introduction and Features of Windows Movie Maker 7

• Design, create and edit a movie using Movie Maker

• Video Editing skills - adjust sound, clip out parts & music to your video.

• Add still photos, animations, title and transitions

Unit IV

MS-Excel

• Introduction to MS-Excel

• Applications of MS- Excel

• Concept of workbook and worksheet

• Layout of Worksheets

• Various Data Types

• Inserting, Removing & Resizing of Columns & Rows;

• Working with Data & Ranges;

• Different Views of Worksheets;

• Column Freezing, Labels, Hiding, Splitting, Merging

• Formula

• Functions

    o Mathematical & Statistical(Abs, Int, Mod, Power, Round, Sqrt, Sum, Sumif, Trunc, Average, Count ,CountA, Countblank, Countif, Max, Min,)

    o Date & Time (Date, Day, Hour, Minute, Now, Second, Time, Today, WeekdayYear)

    o Logical(And,Or,Not,True,False,If)

    o Text(Char,Concatenate,Left,Len,Lower,Mid, Rept,Right,Trim,Upper)

• Auto fill Facilities

    o Filling numbers, month names, days of week

• Sorting data in a spreadsheet

• Filtering Data

    o Auto Filter

    o Advanced Filter

• Charts –Creating line ,Column and Pie Chart

Outcome:

1. Students will use the Internet in their day to day life,
2. Use MS-Excel to create spreadsheets and learn to create the dynamic videos using movie maker.

Reference Books/Website

1. http://www.gcflearnfree.org/office

2. http://www.lynda.com/Windows-Live-Movie-Maker-training-tutorials/259-0.html

3. http://www.tutorialspoint.com/computer_fundamentals/index.htm

4. Rapidex computer course by Pustak Mahal Editorial Board, Unicorn Books,2012

5. Fundamentals of computers (English) Ist Edition by Reema Thareja, Oxford University Press, 2014

Practical:

- Creation of Simple Worksheet like Mark sheet , Pay slip using MS-Excel
- Craating movies in movie maker.
- General use of internet

Highlighted Unit Removed

Course Code	Course Title	Group	Course Category	Credit	C.I.A. (Continouns Internal Assesment)	Theory+ Practical	Total
BOA 311	Information Technology(Web Technologies)	C	Core Course (CC)	4	30	50+20	100

Semester III

Objective:

1. To make the students aware of various tags of HTML and CSS.
2. To give the hands on experience on Adobe Dreamweaver.

Unit I

- Introduction to Web Designing & HTML
- HTML Element/Tags
- HTML Attributes
- HTML Heading
- HTML Paragraph
- HTML Formatting

Unit II

- HTML Links
- HTML Images
- HTML Marquee
- HTML Lists
- HTML Tables

Unit III

- HTML Forms
- HTML CSS Styles
- Style sheet basics
- Inline, Internal and External

Unit IV
- Introducing Dreamweaver
- Learning the interface
- Creating a website

Outcome:

After completing the course, the students will be able to create website using HTML tags and Adobe DreamWeaver

Reference Books

1. http://www.w3schools.com/html/

2. http://www.tutorialspoint.com/html/

3. http://www.adobe.com/devnet/dreamweaver.html

4. HTML 5 : The Missing Manual, II Edition, Mathew Donald, O' Reilly Media, December, 2013

5. Learn HTML & CSS with W3 Schools, Wiley Publishing Inc, 2010

Practical:

- Create webpage using HTML/Adobe Dreamweaver

Course Code	Course Title	Group	Course Category	Credit	C.I.A. (Continouns Internal Assesment)	Theory+ practical	Total
BOA411	Information Technology (Advanced Web Technologies)	C	Core Course (CC)	4	30	50+20	100

Semester IV

Objective:

This paper will familiarize the students with client side scripting language and will expose the students to create dynamic WebPages.

Unit I

- Introduction to JavaScript
- Data Types
- Java Script Variables
- Java Script Operator
- Java script Statements
- Java Script Comments

Unit II

- JavaScript Decision making Statements-
  - o If... Else,
  - o Switch
- Java Script Loops
  - o For Loop
  - o While
  - o Do..While

Unit III

- Java Script Array
- Java Script Functions

- Javascript - HTML DOM
- Event handling

Unit IV

- Introduction to Javascript - Objects
- Javascript - Number
- Javascript - Boolean
- Javascript - Strings
- Javascript - Arrays
- Javascript - Date
- Javascript - Math
- Cookies

Outcome:

Students will be able to create dynamic WebPages using JavaScript.

Reference Books

1. Learn Java Script and Ajax with W3 Schools, Wiley Publishing Inc, December, 2010
2. The Complete Refernce Java Script III Edition, 2013, Thomas A. Powell Fraitz Sehneider, Mc Graw Hill
3. http://www.w3schools.com/js/default.asp

Practical:

Writing program using Java script

Paper has been completely Changed

Course Code	Course Title	Group	Course Category	Credit	C.I.A. (Continouns Internal Assesment)	Theory+ Practical	Total
BOA 511	Information Technology (Business Data Processing& Programming in Visual Basic- I)	C	Core Course (CC)	4	30	50+20	100

Semester V

Objective:
- Students will be exposed to the concepts of DBMS design.
- Students will be introduced to the GUI based programming using Visual Basic 6.0.

UNIT I
- Introduction to database
- Need of Database
- Characteristics of Database
- Need of Relational Database
- View of Data
- Data Abstraction
- Instances and Schemas
- Data Independence
- Data Models
- Data Definition Language
- Data Manipulation Language

UNIT II
- Overview of database design
- Data Normalization(Determining tables, Determining Fields, Determining Relationships)
- Integrity Rules(Primary/Foreign Key, One-to-Many, Many-to-Many, One-to-One)
- Introduction to MS Access
- Create a Table in MS Access
- Data Types, Field Properties , Fields: names, types, properties—default values, format, caption, validation rules
- Data Entry
  - Add/Delete records
- Sort, find/replace, filter/select, re-arrange columns, freeze columns
- Edit a Tables- copy, delete, import, modify table structure

UNIT III

- Setting up Relationships
- Define relationships
- add a relationship
- set a rule for Referential Integrity,
- change the join type, delete a relationship
- Queries & Filter
- Difference between queries and filter ,
- Filter using multiple fields AND, OR & NOT
- Advance filter
- Create Query with one table
- Find record with select query
- Find duplicate record with query
- Find unmatched record with query,
- Run query
- Save and change query.

UNIT IV
- Introduction to Visual Basic
- Introduction Graphical User Interface (GUI)
- The Visual Basic Environment, How to use VB complier to compile / debug and run the programs.
- VB Controls & and it's properties : Label, Text Box, Frame, Command Button, Image, Option Button & Check Box
- Data type, Variables and Constants
- Operators (Arithmetical, Relational and Logical)
- Decision Making Statements : If Statement, If then-else Statement, Nested If & Case Structure
- Displaying Message in Message Box
- Menus, Sub-Procedures and Sub-functions
- Defining / Creating and Modifying a Menu
- Creating a new sub-procedure, Passing Variables to Procedures, Passing Argument ByVal or ByRef, Writing a Function Procedure

Outcome:
- Students will be able to create, edit database using MS-Access including filtering and query of records.
- Students will be able to create small applications using Visual Basic.

Practical:
Database Using MS-Access &Programming in Visual Basic

Reference Books
1. Bipin C.Desai,Introduction to Database Concepts,Galgotia, Publications, 1990
2. RameshBangia,Learning MS Accsss,Khanna Publications,Delhi, 2008
3. Introduction to Database System by C.J. Date, Wiley Publication. 2002

4. Database Concept System by Henery F.Korth, Mc Grawhill Publication, 2009
5. Visual Basic 6 Programming new black book, Steven Holzner, Wiley publication 2000
6. Visual Basic 6 Complete, Steve Brown, Sybex Publication 1999

Paper has been completely Changed

Course Code	Course Title	Group	Course Category	Credit	C.I.A. (Continuums Internal Assessment)	Theory+ Practical	Total
BOA6 11	**Information Technology** (Business Data Processing& Programming in Visual Basic II)	**C**	**Core Course (CC)**	**4**	30	50+20	100

Semester VI

Objective: Students will get exposure to the concept of database connectivity using MS-Access and will be introduced to the advance concept of Visual basic programming.

UNIT I

VB Controls and It's Main Properties

- Combo Box
- List Box
  - Filling the List using Property window / Add Item Method
  - Clear Method,
  - Removing an item from a list
  - Sorting A List Box
  - Making List Boxes Scroll Horizontally
  - Checkmarks In A List Box
- Picture Box
- Scrollbars
- Timer
- Drive List Box
- File List Box
- Dir List Box
- Shape
- Line and OLE

UNIT II

Data Environment and Data Reports

- Introduction
- Types of creating Reports
- Preview report print report

MDI Forms

- Features Of an MDI forms
- Loading MDI forms & child forms
- Creating an simple MDI forms
- Accessing MDI forms

UNIT III

- **Loops :**

  Do—Loop, For—Next & While-Wend
- Arrays Single and Two Dimension Arrays
- Using List Boxes with Array

UNIT IV

- Accessing Database File with DAO
- Using the Data Control ,setting its property
- Using Data Control with forms
- Navigating the database in code

Outcome:

Students will be able to create small applications using MS-Access and Visual Basic 6.0.

Practical:

Database and Report Design Using MS-Access

Programming In Visual Basic 6.0

Reference Books

1. Visual Basic 6 Programming new black book, Steven Holzner, Wiley publication 2000

2. Visual Basic 6 Complete, Steve Brown, Sybex Publication 1999

3. RameshBangia,Learning MS Accsss,Khanna Publications,Delhi, 2008

Some Content on Cyber Security Add

Course Code	Course Title	Course Category	Credit	C.I.A. (Continouns Internal Assesment)	Theory+ Prcatical	Total
JVB302	Basics of Computer	Core Foundation(CF)	4	30	50+20	100

Semester - III

Objective :

To enable students to be aware of using MS Word, MS PowerPoint, Excel and Internet. Students will be able to do daily work using these tools and able to surf internet, download and send emails easily.

Unit I : MS Word

1. An overview of the basics of word processing.

2. How to use spell check, grammar check, and the thesaurus

3. Gain proficiency in editing

4. Formatting a document

5. How to use the undo and redo commands

6. Moving and copying text within a document

7. Typography, paragraph formatting and column formatting

8. How to enhance a document, wizards and templates, and tables

Unit II : MS Excel

1. Creating an excel worksheet

2. Saving an excel worksheet

3. Opening an existing workbook

4. Using formula and functions

5. Printing a worksheet

6. Creating a simple expense worksheet.

Unit III : 1. MS PowerPoint presentation

2. Saving a PowerPoint presentation,

3. Working with an existing PowerPoint presentation,

Unit IV : Internet

1. Basics of Internet

2. Site Surfing

3. Search Engines

4. Email Accounts - Receiving Mails, Composing Mails, Spam, Calendar

5. Download

6. Creating blogs

7. Online conversion

Outcome :

1. Students will be able to apply word, excel and powerpoint in their daily work.

2. Students will be able to make use of internet for their study purpose and will be able to create blog to exhibit their talent.

Practical :

1. Create documents using ms word , marksheet using ms excel and presentationsusing power point.

2. Create an email account, blog and download files

Websites/ Refrence Book :

1. http://www.tutorialspoint.com/computer_fundamentals/index.htm

2. http://office.microsoft.com/en-us/training/.

3. http://www.gcflearnfree.org/office2007

4. Rapidex computer course by Pustak Mahal Editorial Board, Unicorn Books,2012

5. Fundamentals of computers (English) Ist Edition by Reema Thareja, Oxford University Press, 2014

Jain Vishva Bharati Institute

A University dedicated to Oriental Studies & Human Values

JVBI/2021-22/ 125

Date : 05/10/2021

To

Prof (Dr) Priyadarshi Patni

Director, Faculty of Computer Science

L M College of Science & Technology (Autonomous)

Jodhpur. 094141 29504

Sir,

Board of Studies meeting is to be conducted to update syllabus of B.A. Information Technology and foundation course on Basics of Computer at graduation level Acharya Kalu Kanya Mahavidhyalaya, Jain Vishva Bharati Institute. You are requested to attend the meeting as an external member. Meeting will be held on 9th Oct. 2021.

05/10/2021

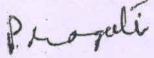(A.P. Tripathi)

Principal

AcharyaKaluKanyaMahavidhyalaya

JVBI Ladnun

ACHARYA KALU KANYA MAHAVIDYALAYA

JAIN VISHVA BHARTI INSTITUTE, LADNUN

Minutes of Board of Studies held on 9 Oct 2021

Board of Studies meeting for updating the syllabus of B.A. Information Technology and foundation course on Basics of Computer at graduation leve Acharya KaluKanya Mahavidhyalaya was held on 9th Oct 2021, Following members were present in the meeting
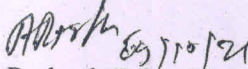
1. Prof. Anand PrakashTripathi, (Principal AKKM)

2. Prof (Dr) Priyadarshi Patni Director, Faculty of Computer Science, LM College of Science & Technology (Autonomous), Jodhpur

3. Dr. Pragati Bhatnagar, AssistantProfessor, Computer Applications, AKKM

After discussions in the meeting it was concluded thatto inculcate changes in recent trends of Information Technology updation and changes are required in the syllabus. The content of semester one, two, three and four were updated whereas in semester V and VI two new papers related to programming languages java were introduced in place of Business data processing and Programming in visual basic. Java is most popular programming language used to create Web applications and platforms. Python is general purpose programming language and is highly productive as compared to any otherlanguages. The content of foundation course was also updated and cyber security is introduced in the syllabus. The new syllabus will be introduced from the year 2022-23. Copy of the syllabus is attached herewith.\

Prof (Dr) Priyadarshi Patni   Prof. Anand Prakash Tripathi   Dr. Pragati Bhatnaga

(Director, Faculty of Computer Sc.   (Principal AKKM)   (Asst. Prof., AKKM)

L M College of Science & Technology)

New syllabus – 2021-22

Information Technology for BA

Course Code	Course Title	Group	Course Category	Credit	C.I.A.	T+P	Total
BOA111	FUNDANMENTALS OF IT – I	C	Core Course (CC)	4	30	50+20	100
BOA211	FUNDANMENTALS OF IT – II	C	Core Course (CC)	4	30	50+20	100
BOA311	WEB TECHNOLOGIES	C	Core Course (CC)	4	30	50+20	100
BOA411	ADVANCED WEB TECHNOLOGIES	C	Core Course (CC)	4	30	50+20	100
BOA511	JAVA PROGRAMMING	C	Core Course (CC)	4	30	50+20	100
BOA611	PYTHON PROGRAMMING	C	Core Course (CC)	4	30	50+20	100
JVB302	BASICS OF COMPUTER	CF	Core Foundation	4	30	50+20	100

Pragati

Course Code	Course Title	Group	Course Category	Credit	C.I.A. (Continuous Internal Assessment)	Theory & Practical	Total
BOA 111	FUNDANMENTALS OF IT– I	C	Core Course (CC)	4	30	50+20	100

Objective:

This paper is intended to be the first basic course for the students of Information Technology. The main objectives of this course are;

1. It will expose the students to the fundamentals of the IT
2. Students will have the introductory knowledge of the MS-Windows
3. Practically students will be able to use MS-PowerPoint and MS-Word.

Course Contents:

Unit I

Computer: Introduction, What is Computer, Basic Applications of Computer, Components of Computer System, Central Processing Unit, Keyboard, mouse and VDU, Other Input devices, Other Output devices, Computer Memory, Concept of Hardware and Software, Hardware, Software, Application Software, Systems software, Concept of computing, data and information, Applications of IECT, e-governance, Entertainment.

Unit II

Operating System :Introduction, Basics of Operating System, Operating system, Basics of popular operating system (LINUX, WINDOWS), The User Interface, Task Bar, Icons, Menu, Running an Application, Operating System Simple Setting, Changing System Date And Time, Changing Display Properties, To Add Or Remove A Windows Component, Changing Mouse Properties, Adding and removing Printers, File and Directory Management, Creating and renaming of files and directories, Common utilities

Unit III

Word Processing : Introduction, Word Processing Basics, Opening Word Processing Package, Menu Bar, Using The Help, Using The Icons Below Menu Bar, Opening and closing Documents, Opening Documents, Save and Save as, Page Setup, Print Preview, Printing of Documents, Text Creation and manipulation, Document Creation, Editing Text, Text Selection, Cut, Copy and Paste, Spell check, Thesaurus, Formatting the Text, Font and Size, Alignment of Text, Paragraph Indenting, Bullets and Numbering, Changing case, Table Manipulation, Mail Merge

Unit IV

Presentations: Introduction, Objectives, Basics, Using PowerPoint, Opening A PowerPoint Presentation, Saving A Presentation, Creation of Presentation, Creating a Presentation Using a Template, Creating a Blank Presentation, Entering and Editing Text, Inserting And Deleting Slides in a Presentation. Inserting Word Table or An Excel Worksheet, Adding Clip Art Pictures, Inserting Other Objects, Resizing and Scaling an Object, Presentation of Slides, Viewing A Presentation, Choosing a Set Up for Presentation, Printing Slides And Handouts, Slide Show, Running a Slide Show, Transition and Animation

Outcome:

- Students will apply the knowledge of IT practically in their day to day life.
- Students will be able to work on computers comfortably.
- Students will be able to create well formatted documents and attractive presentations.

Reference Books/Website
1. http://www.tutorialspoint.com/computer_fundamentals/index.htm
2. http://www.gcflearnfree.org/office
3. Rapidex computer course by Pustak Mahal Editorial Board, Unicorn Books,2015
4. Fundamentals of computers (English) Ist Edition by Reema Thareja, Oxford University Press, 2019

Practical:
- General use of Windows Operating System
- Creating document in MS-Word like Advertisement, Letter, Tables, Mail Merge etc
- Creating   presentations   in   power   point.

Course Code	Course Title	Group	Course Category	Credit	C.I.A. (Continuous Internal Assessment)	Theory & Practical	Total
BOA 211	FUNDANMENTALS OF IT – II	C	Core Course (CC)	4	30	50+20	100

Objective:

This paper is intended to be the first basic course for the students of Information Technology. The main objectives of this course are

- Students will be introduced and Exposed to using Spread Sheet Software.
- Students will be exposed to internet and cyber security concepts .

Unit I

Using Spread Sheets: Introduction: Elements of Electronic Spread Sheet, Opening of Spread Sheet, Addressing of Cells, Printing of Spread Sheet, Saving Workbooks, Manipulation of Cells, Entering Text, Numbers and Dates, Creating Text, Number and Date Series, Editing Worksheet Data, Inserting and Deleting Rows, Column, Changing Cell Height and Width, Formulas and Function, Using Formula, Function

Unit II

Introduction to Internet, www and web browsers: Introduction, Basic of Computer Networks, Local Area Network (LAN), Wide Area Network (WAN), Internet, Concept of Internet, Applications of Internet, Connecting to the Internet, Troubleshooting, World Wide Web (WWW), Web Browsing Software, Popular Web Browsing Software, Search Engines, Popular Search Engines / Search for content, Accessing Web Browser, Using Favorites Folder, Downloading Web Pages, Printing Web Pages, Understanding URL, Surfing the web, Using e-governance website

Unit III

Communications and Collaboration: Introduction, Basics of E-mail, What is an Electronic Mail, Email Addressing, Using E-mails, Opening Email account, Mailbox: Inbox and Outbox, Creating and Sending a new E-mail, Replying to an E-mail message, Forwarding an E-mail message, Sorting and Searching emails, Document collaboration, Instant Messaging and Collaboration, Using Instant messaging, Instant messaging providers, Netiquettes

Unit IV

Cyber Security, Introduction to Cyber Security, Basic Cyber Security Concepts, Layers of security, Vulnerability &Threats, Harmful acts, -active attacks, passive attacks, Software attacks, hardware attacks, Cyber Threats-Cyber Warfare, Cyber Crime, Cyber terrorism, Cyber Espionage, etc., Comprehensive Cyber Security Policy

Outcome:

- Students will apply the knowledge of IT practically in their day to day life and use internet effectively.
- Students will be able to use and send email.
- Students will be able to create excel sheets.

Reference Books/Website

1. http://www.gcflearnfree.org/office
2. http://www.lynda.com/Windows-Live-Movie-Maker-training-tutorials/259-0.html
3. http://www.tutorialspoint.com/computer_fundamentals/index.htm
4. Rapidex computer course by Pustak Mahal Editorial Board, Unicorn Books,2012

5. Fundamentals of computers (English) Ist Edition by Reema Thareja, Oxford University Press, 2014

Practical:

- Creation of Simple Worksheet like Mark sheet , Pay slip using MS-Excel
- General use of internet

Semester III

Course Code	Course Title	Group	Course Category	Credit	C.I.A. (Continuous Internal Assessment)	Theory+ Practical	Total
BOA 311	Web Technologies - HTML	C	Core Course (CC)	4	30	50+20	100

Objective: Main objectives of this course are
1. To introduce students to HTML and CSS for creating web pages and web sites.
2. To give the hands on exercise on HTML

Unit I

Introduction to HTML, Introduction to Web Deigning & HTML, HTML Elements/Tag, HTML Attributes, HTML Heading, HTML Paragraph, HTML Formatting

Unit II

Working with links, bookmarks, Images, Marquee, HTML Lists, HTML Table – insert row, columns, rowspan, colspan

Unit III

Using CSS, Introduction to CSS, HTML CSS Styles, Inline, Internal, External

Unit IV

HTML Forms, Introduction to Forms, Form Attributes, Form Elements, Input Type - Text Input, Buttons, Check Box, Radio Button, Select Box or Drop Down Box, Fieldset and Legend

Outcome:

After completing the course, the students will be able to create website using HTML .

Reference Books
1. http://www.w3schools.com/html/
2. http://www.tutorialspoint.com/html/
3. http://www.adobe.com/devnet/dreamweaver.html
4. HTML 5 : The Missing Manual, II Edition, Mathew Donald, O' Reilly Media, December, 2013
5. Learn HTML & CSS with W3 Schools, Wiley Publishing Inc, 2010

Practical:
- Create webpages using HTML

Course Code	Course Title	Group	Course Category	Credit	C.I.A. (Continuous Internal Assessment)	Theory+ practical	Total
BOA411	Advanced Web Technologies – Java Script	C	Core Course (CC)	4	30	50+20	100

Objective:
This paper will familiarize the students with client side scripting language and will expose the students to create dynamic WebPages.

Unit I
Introduction to Javascript, Java Script Variables, Operators, Statements, Comments

Unit II
Java Script Statements - Decision Making Statements, If, If...Else, Else ..If, Switch, Loops, For Loop, While, Do.. While, HTML Marquee, HTML Lists, HTML Table

Unit III
Arrays, Functions & HTML DOM , Java Script Arrays, Java Script Functions, HTML DOM, Event Handling, CSS - Inline, Internal, External

Unit IV
Java Script Objects & Cookies, Introduction to Objects, Number, Boolean, Strings, Arrays, Date, Math, Cookies

Outcome:
Students will be able to create dynamic WebPages using JavaScript.

Reference Books
1. Learn Java Script and Ajax with W3 Schools, Wiley Publishing Inc, December, 2010
2. The Complete Refernce Java Script III Edition, 2013, Thomas A. Powell Fraitz Sehneider, Mc Graw Hill
3. http://www.w3schools.com/js/default.asp

Practical:
Writing programs using Java script

New Paper Introduced

Semester V

Course Code	Course Title	Group	Course Category	Credit	C.I.A. (Continuous Internal Assessment)	Theory+ Practical	Total
BOA511	Java Programming	C	Core Course (CC)	4	30	50+20	100

Objective:
This paper will familiarize the students with programming language Java and students will be able to write programs in Java.

Unit I
Algorithms and Flowcharts to Solve Problems, Flow Chart Symbols, Basic algorithms/flowcharts for sequential processing, decision based processing and iterative processing. Some examples like: Exchanging values of two variables, summation of a set of numbers, ,GCD (Greatest Common Division) of two numbers, Test whether a number is prime, factorial computation, Fibonacci sequence, sum of a series, , Find largest number in an array,, etc.

Unit II
Introduction to Java: Bytecode, features of Java, data types, variables and arrays, operators, control statements. Objects & Classes: Object Oriented Programming, defining classes, static fields and methods, object construction

Unit III
Inheritance: Basics, using super, method overriding, using abstract classes, using final with inheritance.

Unit IV
Packages and Interfaces: Defining a package, importing package, defining an interface, implementing and applying interfaces. Exception Handling: Fundamentals, exception types, using try and cache.

Outcome:
Students will be able to write programs using JavaScript.

Reference Books/Web Sites
1. Programming with JAVA, E Balagurusamy, McGraw Hill Educaion,2019
2. Java 8 Programming Black Book, DT Editorial Services ,Dreamtech Press,2015
3. https://www.javatpoint.com/java-tutorial
4. https://www.tutorialspoint.com/java/index.htm

Practical:
Writing programs using Java language.

P ragali

New Paper Introduced

Semester VI

Course Code	Course Title	Group	Course Category	Credit	C.I.A. (Continuous Internal Assessment)	Theory+ Practical	Total
BOA611	Python Programming	C	Core Course (CC)	4	30	50+20	100

Objective:
This paper will familiarize the students with programming language Python and students will be able to write programs in Python.

Unit I
Introduction to Python Python Introduction, Technical Strength of Python, Introduction to Python Interpreter and program execution, Using Comments, Literals, Constants, Python's Built-in Data types, Numbers (Integers, Floats, Complex Numbers, Real, Sets), Strings (Slicing, Indexing, Concatenation, other operations on Strings), Accepting input from Console, printing statements, Simple 'Python' programs.

Unit II
Operators, Expressions and Python Statements Assignment statement, expressions, Arithmetic, Relational, Logical, Bitwise operators and their precedence, Conditional statements: if, if-else, if-elif-else; simple programs, Notion of iterative computation and control flow –range function, While Statement, For loop, break statement, Continue Statement, Pass statement, else, assert.

Unit III
Sequence Data Types Lists, tuples and dictionary, (Slicing, Indexing, Concatenation, other operations on Sequence data type), concept of mutability, Examples to include finding the maximum, minimum, mean; linear search on list/tuple of numbers, and counting the frequency of elements in a list using a dictionary.

Unit IV
Functions: Top-down approach of problem solving, Modular programming and functions, Function parameters, Local variables, the Return statement, DocStrings, global statement, Default argument values, keyword arguments, VarArgs parameters. Library function-input(), eval(),print(), String Functions: count(), find(), rfind(), capitalize(), title(), lower(), upper(), swapcase(), islower(), isupper(), istitle(),Numeric Functions: eval(), max(), min(), pow(), round(), int(), random(), ceil(), floor(), sqrt()

Outcome:
Students will be able to write programs using JavaScript.

Reference Books
1. Python Programming , O-Level Module,T Balajji Publication,2020
2. The Complete Reference Python, Mc Grow Hill Education, 2018
3. https://www.w3schools.com/python
4. https://www.tutorialspoint.com/python/index.htm

Practical: ,,

Writing programs using Python

P. ragali

Foundation Course in Computers

Course Code	Course Title	Course Category	Credit	C.I.A. (Continuous Internal Assessment)	Theory+ Practical	Total
JVB302	BASICS OF COMPUTER	Foundation Course	4	30	50+20	100

Objective:

This paper is intended to be the first basic course for the students of Information Technology. The main objectives of this course are;

1. It will expose the students to the fundamentals of the IT
2. Students will be having the introductory knowledge of the MS-Windows
3. Practically students will be able to use MS-PowerPoint and MS-Word.
4. It will expose the students to concept of Internet an Cybersecurity

Unit I

Word Processing: Introduction, Word Processing Basics, Menu Bar, Using The Icons Below Menu Bar, Opening and closing Documents, Opening Documents, Save and Save as, Page Setup, Print Preview, Document Creation, Editing Text, Text Selection, Cut, Copy and Paste, Spell check, Thesaurus, Formatting the Text, Font and Size selection, Alignment of Text, Paragraph Indenting, Bullets and Numbering, Changing case, Table Manipulation, Draw Table, Changing cell width and height, Alignment of Text in cell, Delete / Insertion of row and column, Border and Shading

Unit II

Presentations, Introduction, Basics, Using PowerPoint, Opening A PowerPoint Presentation, Saving A Presentation, Creation of Presentation, Creating a Presentation Using a Template, Creating a Blank Presentation, Editing Text, Preparation of Slides: Inserting Word Table or an Excel Worksheet, Adding Clip Art Pictures, Inserting Other Objects, Resizing and Scaling an object, Presentation of Slides: Viewing, Choosing a set up for Presentation, Slide Show, Running a Slide Show, Transition and Slide Timing, Automating Slide Show

Unit III

Using Spread Sheets, Introduction, Opening of Spread Sheet, Addressing of Cells, Printing of Spread Sheet, Saving Workbooks, Manipulation of Cells, Entering Text, Numbers and Dates, Creating Text, Number and Date Series, Editing Worksheet Data, Inserting and Deleting Rows, Column, Changing Cell Height and Width, Formulas and Function, Using Formula, Function

Unit IV

Introduction to Internet & Cyber Security : Basics of Computer Networks, LAN, WAN, Internet, Applications of Internet, Connecting to the Internet, World Wide Web (WWW), Web Browsing Software, Search Engines, Downloading Web Pages, Understanding URL, Surfing the web, Basics of E-mail, Email Addressing, Cyber Security: Layers of security, Vulnerability &Threats, Harmful acts, active attacks, passive attacks, Software attacks, hardware attacks, Cyber Threats, Cyber Crime, Cyber terrorism, Cyber Espionage, etc.,

Introduction to Indian Cyber Law.

Outcome:

- Students will apply the knowledge of IT practically in their day to day life.
- Students will be able to work on computers comfortably.
- Students will be able to create well formatted documents and attractive presentations.
- Students will be able to create spreadsheets
- Students will be well versed with concept of Internet & Cyber Security

Reference Books/Website

1. http://www.tutorialspoint.com/computer_fundamentals/index.htm
2. http://www.gcflearnfree.org/office
3. Rapidex computer course by Pustak Mahal Editorial Board, Unicorn Books,2015
4. Fundamentals of computers (English) Ist Edition by Reema Thareja, Oxford University Press, 2019

Practical

- General use of Windows Operating System
- Creating document in MS-Word like Advertisement, Letter, Tables, Mail Merge etc
- Creating presentations in power point.
- Creation of Simple Worksheet like Mark sheet , Pay slip using MS-Excel
- General use of internet