SKILL ENHANCEMENT COURSE:

FS 301: IT TOOLS FOR BUSINESS

Course Objectives:

This course is designed to enable students develop IT skills that are a pre-requisite today's work environment. With greater human-computer interaction in each sphere of work, this course will equip them with basic computing skills that will enhance their employability in general.

Learning Outcomes: After studying this course, you will be able to-

- Make meaningful representations of data in the form of charts and pivot tables.
- Draw analysis on data using spreadsheets and use interpretation to make decisions.
- Generate word documents with appropriate formatting, layout, proofing.
- Manage data for generating queries, forms and reports in a database.

Course Contents:

Unit I (3 weeks)

Spreadsheets:

Concept of worksheets and workbooks, creating, opening, closing and saving workbooks, moving, copying, inserting, deleting and renaming worksheets, working with multiple worksheets and multiple workbooks, controlling worksheet views, naming cells using name box, name create and name define; Exchanging data using clipboard, object linking and embedding; Printing and Protecting worksheets: Adjusting margins, creating headers and footers, setting page breaks, changing orientation, creating portable documents and printing data and formulae; Implementing file level security and protecting data within the worksheet; Understanding absolute, relative and mixed referencing in formulas, referencing cells in other worksheets and workbooks, correcting common formula errors, working with inbuilt function categories like mathematical, statistical, text, lookup, information, logical, database, date and time and basic financial functions. Conditional formatting. Introduction to recording and execution of macros. Uses of pivot tables.

References:

Microsoft Excel 2016 Step by Step, by Curtis Frye (Chapter 1, 2, 3, 4, 6, 11) Microsoft Office 2016 Step by Step, by Joan Lambert, Curtis Frye (Chapter 6 and 8)

IT TOOLS FOR BUSINESS

Unit II (3 weeks)

Data Analysis in Spreadsheets

Consolidating worksheets and workbooks using formulae and data consolidate command; Performing what-if analysis: Types of what if analysis (manual, data tables, scenario manager), what-if analysis in reverse (goal-seek, solver), Choosing a chart type, understanding data points and data series, editing and formatting chart elements, and creating sparkline graphics, Analysing data using pivot tables: Creating, formatting and modifying a pivot table, sorting, filtering and grouping items, creating calculated field and calculated item, creating pivot table charts, producing a report with pivot tables. Use of solver to solve different business problems.

References:

Microsoft Excel 2016 Step by Step, by Curtis Frye (Chapter 7, 8, 9, 10, 11, 12) Microsoft Office 2016 Step by Step, by Joan Lambert, Curtis Frye (Chapter 8 and 9)

Unit III (3 weeks)

Word-processing

Introduction: Creating and saving your document, displaying different views, working with styles and character formatting, working with paragraph formatting techniques using indents, tabs, alignment, spacing, bullets and numbering and creating borders; Page setup and sections: Setting page margins, orientation, headers and footers, end notes and foot notes, creating section breaks and page borders; Working with tables: Creating tables, modifying table layout and design, sorting, inserting graphics in a table, table math, converting text to table and vice versa; Create newspaper columns, indexes and table of contents, Spell check your document using inbuilt and custom dictionaries, checking grammar and style, using thesaurus and finding and replacing text; Create bookmarks, captions and cross referencing, adding hyperlinks, adding sources and compiling and bibliography; Mail merge: Creating and editing your main document and data source, sorting and filtering merged documents and using merge instructions like ask, fill-in and if-then-else; Linking and embedding to keep things together.

IT TOOLS FOR BUSINESS

References:

Microsoft Word 2013 Step by Step, by Joan Lambert, Joyce Cox (Chapter 2, 3, 4, 5, 6, 12, 13, 14, 15)

Microsoft Office 2016 Step by Step, by Joan Lambert, Curtis Frye (Chapter 3, 4, 5)

Unit IV (3 weeks)

Databases

Introduction to Database Development: Database Terminology, Objects, Creating Tables, working with fields, understanding Data types, Changing table design, Assigning Field Properties, Setting Primary Keys, using field validation and record validation rules, Indexing, working with multiple tables, Relationships & Integrity Rules, Join Properties, Record manipulation, Sorting & Filtering; Select data with queries: Creating Query by design & by wizard (Select, Make Table, Append, Delete, Cross Tab, Update, Parameterized Query, Find Duplicate and Find Unmatched), Creating multi table queries, creating & working with table joins. Using operators & expressions: Creating simple & advance criteria; Working with forms: Creating Basic forms, working with bound, unbound and calculated controls, understanding property sheet, Working with Data on Forms: Changing Layout, creating Sub Forms, creating list box, combo box and option groups; Working with Reports: Creating Basic Reports, Creating Header & Footer, Placing Controls on reports, sorting & grouping, Creating Sub reports.

References:

Microsoft Access 2013 Step by Step, by Joyce Cox, Joan Lambert (Chapter 1, 2, 3, 4, 5, 6, 7, 8, 9)

Microsoft Office Access 2003 Step by Step, Online Training Solutions Inc. (Chapter 1, 2, 4, 5, 6, 7)

Textbooks:

- Microsoft Office Professional 2013 Step by Step by Beth Melton, Mark Dodge, Echo Swinford, Andrew Couch.
- 2. Office 2019 for Dummies for Dummies by Wallace Wang, Wiley
- 3. Microsoft Office 2019 Step by Step, by Joan Lambert, Curtis Frye

IT TOOLS FOR BUSINESS

Additional Readings:

- 1. Excel 2013 Charts and Graphs, Jelen, Pearson, Microsoft Press, U.S.
- 2. Excel 2013 Pivot Table Data Crunching, Jelen, Pearson
- 3. Access 2019 Bible 2013 by Alexander Michael, Wiley
- 4. Advanced Database Projects in Access 2007: Suitable for Users of Office 2010, Ian Rendell and Julian Mott,

Teaching Learning Process:

Class room lecture, Lab sessions, Workshop, Project Assignments.

Assessment Method

- 1. Practical evaluation of 50% marks
- 2. End term University Exam of 50% marks

Key words: Data Analysis, Word processing, worksheets, Primary Keys, Table, Field Validation.