## 30 hours Certificate course in Computer Applications (03-07-2017 to 12-07-2017)

#### Syllabus/ Curriculum:-

**Introduction of Computer:** What is Computer, Applications of Computer, Types of Computer, Generations of computer, Architecture of Computer, Components of Computer System, Central Processing Unit (CPU), Keyboard and Mouse, Other input: tablet, touchpad, scanner, trackball; output Devices: printer, monitor, plotter, Computer Memory (primary and secondary), storage unit, Classification of Computer memory, Concepts of Hardware and Software (system software, application software); Number system: binary, octal, hexa, conversion of number system.

**Introduction to windows & DOS:** Ms-window, Window NT, Window 95, Window 98, Window ME, Window XP, Window Vista, Windows, Components of Window, Viewing of File, Folders and Directories, Creating and Renaming of files and folders. View the contents of a directory, Create and delete directories, Copy files, Rename files, Delete files, MS-DOS and command line: internal and external types, Command prompt: Colour change, title change.

**MS Word:** Features of word processor, MS- Word 2007, Document preparation using word processing software: Purpose and characterisation of documents, Word Processing Basics, 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, Formatting the Text, Font and Size selection, Alignment of Text, Paragraph Indenting, Bullets and Numbering, Changing case, Wrap, Page Setting, Find and replace, Header and footer, Border and shading, background colour, bullets and numbering, table formulation, paragraph and page layout, alignment and justification, charts, Table Manipulation, Draw Table, Changing cell width and height, Alignment of Text in cell, Delete / Insertion of row and column, Border and shading, Formatting of text; Printing of word document, graphs, diagrams, mail merge, Using Smart Art, Using Word Art.

**MS PowerPoint:** Basics 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, Preparation of Slides, Inserting Word Table or An Excel Worksheet, Adding Clip Art Pictures, Inserting Table, inserting audio and video, Using Smart Art, 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 Slide Timings, Automating a Slide Show, Taking printouts of presentation.

MS EXCEL: Concept of Spreadsheet: Create Worksheets and Workbooks, Create a workbook, Copy and move a worksheet, Search for data within a workbook, Change worksheet tab colour, Rename a worksheet, Change worksheet order, Insert and delete columns or rows, Change workbook themes, Adjust row height and column width, Insert headers and footers, Display formulas, Data Validation, Create custom number formats, Configure data validation, Create custom conditional formatting, Create Tables, Create and Manage Tables, Create an Excel table from a cell range, Convert a table to a cell range, Add or remove table rows and columns, Manage Table Styles and Options, Apply styles to tables, Configure table style options, Insert total rows, Filter and Sort a Table, Filter records, Sort data by multiple columns, Change sort order, Perform Operations with Formulas and Functions, Summarize Data by using Functions, Insert references, Perform calculations by using the SUM function, Perform calculations by using MIN and MAX functions, Perform calculations by using the COUNT function, Perform calculations by using the AVERAGE function, Format text by using UPPER, LOWER, and PROPER functions, Format text by using the CONCATENATE function, Create Charts and Objects: Create Charts, Create a new chart, Format Charts, Resize charts, Add and modify chart elements, Apply chart layouts and styles, Move charts to a chart sheet, Insert text boxes and shapes, Insert images.

**MS** Access: Information Storage and Material: creating, editing, and viewing database, adding, deleting, and undeleting records, searching a database, ordering the database, on a selected key.

**Basic of Networking & Internet:** Concept of networking, LAN, WAN; Concept of Internet; Applications of Internet; connecting to internet; What is ISP; Knowing the Internet; Basics of internet connectivity related troubleshooting, World Wide Web; Web Browsing software, Search Engines; Overview of Internet Browsers, Understanding URL; Domain name; IP Address; http, file virus, partition table Virus Detection, Prevention and cure, Antivirus. Basics of electronic mail; Getting an email account; Sending and receiving emails; Accessing sent emails.

### **Assessment procedure**

The instructor interacted with the students on one-to-one basis and took their doubts in each session. 4 assessments and a final test were taken during the course to strengthen their knowledge of the Python language. Certifications by the institutions were provided to successful participants. Select students would be given exposure to Capstone project sessions and internship opportunities. The candidates will be provided the certificates on the completion of the course provided they successfully pass the written test which will be conducted at the culmination of classes.

#### **Summary Report:**

Shyam Lal College, IQAC & Department of computer Science organised a 30 hours Certificate course in Computer Applications from 03-07-2017 to 12-07-2017. Introduction to Certificate Course in Computer Applications is offered to the students who are pursuing graduation in Shyamlal College, University of Delhi. This course aims to introduce the discipline of Computer Applications to the students who wish to either take up entry level jobs in small scale computer industry or use computer technology in study of Humanities. The courses are designed to promote computer literacy, and use and appreciate computer technology in day-to-day life. Inclusion of programming courses promotes logical and analytical thinking. Total 155 Students enrolled and successfully completed this course.

The curriculum for Computer Application courses was developed by the Department of Computer Application by following the due diligent process. Close consultations were held with the college teachers involved in teaching of the courses.

The course familiarizes the students with fundamentals of computers hardware and software. It introduces the basic computer technologies and provides hands-on practice in the use of commonly used software in small scale industry. Thus the course provides skills for entry level jobs. The course also inculcates logical and analytical thinking by way of offering programming languages.

## Learning Outcomes:-

The Computer Application Programme has been designed with a year wise approach in mind.

The course provides knowledge of basic computer through a variety of applications.

After completion of this course a student will be able to:

- 1. Efficiently use Office Automation Tools like word processors, spreadsheets and presentation tools.
- 2. Use multimedia authoring tools to design small applications using sound, audio, and video/animation.
- 3. Develop simple websites using HTML/DHTML,
- 4. Develop and implement a simple project based on case studies.





# SLC (University of Delhi) **Shyam Lal College IQAC & Department of Computer** Science organize **Certificate Course in Computer Applications (30hrs)** Date: From 3<sup>rd</sup> July, 2017 to 12<sup>th</sup> July, 2017 Introduction to Windows & MS-Office **Basics of Networking & Internet** Multimedia Introduction to HTML Dr. Alka Sharma Dr. Rabi Narayan Kar Convenor, IQAC Principal, SLC