


Part A Introduction		
Program: Under Graduate Course	Level – Beginner	Session: 2022-23
Course Code	V1-COS-IT	
Course Title	Information Technology	
Course Type	Vocational	
Pre-requisite (if any)	No Pre-requisite	
Course Learning outcomes (CLO)	<p>After completing the course, student will be able to –</p> <ul style="list-style-type: none"> • Get an understanding of the basic components, use and application of different Information Technology systems. • Understand the impact of current and new technologies on methods of working in the outside world • Function as discerning students in an increasingly digital society • Access various tools and applications for learning and skill development opportunities • Practice safe, legal and ethical means of using Information Technology 	
Expected Job Role / Career opportunities	<p>Job Role – Back Office Coordinator, Computer Operator, Office Assistant, IT Lab Technician, Desktop Administrator, School/College Technical Officer, ICT Helpdesk Technician.</p> <p>Career Opportunities – Some typical employers –</p> <ul style="list-style-type: none"> ❖ All private and govt. offices ❖ Showrooms, Printing Press ❖ Clinics, Hospitals ❖ Online Facility Center ❖ Educational Institutions ❖ Any organisation that uses computer systems ❖ Self-employment/freelance work is often possible for individuals with appropriate experience. 	
Credit Value	2 (Th) + 2 (Pr) = 4	


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Part B- Content of the Course

Total No. of Lectures + Practical (in hours per week): **L-1 Hr / P-1 Lab Hr**

Total No. of Lectures/ Practical: **L-30hrs/P-30hrs**

Module	Topics	No. of Hours
I	<p>Information Technology –Introduction to IT, Objectives, Evolution, Purpose (Connecting , Creating, Interacting),Usefulness, Applications, Types of IT, Creating textual, visual and audio-video communication.</p> <p>IT application areas in everyday life - E-Commerce, E-governance, Banking, Agriculture, Education, Medicine, Defense, Transport, Publicity, Manufacturing, Finance, Travel & Leisure, Libraries, Expert Systems, Retail.</p> <p>Advantages of IT in everyday life, its Disadvantages.</p> <p>IT Terminology - The Internet and its uses and services,WWW,Web Browser, Search Engine, Website, Portal, Internet Service Provider (ISP), structure of a web address, URL, Hyperlink, Cloud,</p>	05
II	<p>Computers, Data Storage and Peripherals: Types and classification of computers, Block diagram of computer.</p> <p>Inside a computer - SMPS, Motherboard, Ports and Interfaces, expansion cards, ribbon cables, memory chips, different processors and clock speed.</p> <p>Input Devices: Characteristics and uses of keyboard, numeric keypad, pointing devices, remote control, joystick/driving wheel, touch screen, scanner, barcode reader, camera, microphone, sensors, light pen.</p> <p>Output Devices: Characteristics and uses of monitors, touch screen, multimedia projector, different types of printers, plotter, 3Dprinters, speaker, actuator.</p>	04
III	<p>Storage devices: Hard Disks and its types – PATA, SATA, SCSI, SSD, NVM Express etc., Compact Disc – CD-ROM, CD-RW, VCD, DVD, DVD-RW, USBDrives, Blue Ray Disc, SD/MMC Memory cards, Zip Drive, Formatting & Scanning a HD, Partitioning a HD..</p> <p>Computer Software:Definition, Characteristics, Relationship with hardware, Types of Software: system software, Application Software, Firmware, Role of System Software, Types of system Software: Operating Systems, Language Translator, Utility Programs, Communication software, Antivirus Software.</p>	04
IV	<p>Application Software–Types - Database, Graphics, Education, Entertainment Software, Mobile App Software, Social Media Software: Instant Messaging, Email, Chat Bot, Web Blogs. Free Open Source Software (FOSS).</p> <p>Application software uses - Word Processing, Spreadsheet, Presentation, Database, Graphics, Designing, Recording sound and video, newsletters, posters, websites, multimedia presentations, audio, video, media streaming and E-publications, blog, forum, wiki, social networking.</p> <p>Using office tools - any of MS-Office/ Libre Office,</p> <p>Cloud based services- Google Workplace – working with Mail, Google Docs, Sheets, Forms, Slides, Calendar, Meet, Drive, Zoho Mail, WPS Office, Office Suite, Polaris Office, Only Office Docs, Word Perfect etc.</p> <p>Utility Software - PDF Creator, File Archiving and Storage, File Converter</p> <p>Collaboration tools –Docs, Chat, forum, wiki, online groups, audio/video conferencing, social bookmarking. Tools for social networking and Web Conferencing.</p>	10

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V	<p>Managing files - Locate stored files, Open and import files of different types, Save files in a planned hierarchical directory/folder structure, Save files using appropriate file names.</p> <p>Save and print files in a variety of formats including a document, screenshots, database reports, data tables, graphs/charts, a web page in browser view, a web page in HTML view Save and export in the file format of an application package including .docx, .doc, .xlsx, .xls, .sdb, .sdc, .accdb .odb, .rtf, .pptx, .ppt, Save and export in a generic file format including .csv, .txt, .rtf, .pdf, .css, .htm, .jpg, .png</p> <p>File formats - Characteristics and uses of file formats including css, csv, gif, htm, jpg, pdf, png, rtf, txt, zip, rar</p> <p>Compress files - Reduce file sizes for storage or transmission where necessary using file compression including .zip, .rar</p> <p>File compression - The need to reduce file sizes for storage or transfer, tools for file compression.</p>	07
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Practical

Hardware Lab

1. Prepare a list of various computer peripherals. (e.g. CPU, Mother Board, RAM, Hard Drive, Optical Drive, Solid State Drive, Monitor, Keyboard, Mouse, Speaker, Web cam, Printer, Scanner, microphone, speakers, modem, projector etc).
2. Identify common ports, associated cables, and their connectors.
3. Observe various connectors, ports back and front side of the computer. Write their purpose and specifications. (e.g. Power, PS/2 keyboard and mouse, Serial and parallel, USB, VGA, LAN, Audio & microphone, Firewire, HDMI, games, SATA etc.)

MS Office/ Libre Office

1. Create a document and apply different formatting options.
2. Design a Greeting Card using word art and smart arts for different festivals.
3. Create a document and insert header and footer, page title, borders and shading etc.
4. Create a document, set the margins, orientation, size, Column, Water mark, page, color and page borders etc.
5. Insert a table into the document. Prepare a mark sheet of your class subjects.
6. Prepare an invitation letter in MS-WORD and apply mail-merge
7. Apply the creating, editing, saving, printing securing & protecting operations to an excel spreadsheets.
8. Prepare a bar chart & pie chart for analysis of five year results of your institute.
9. Work on the following exercise on a workbook:
10. Copy an existing Sheet
11. Rename the old Sheet
12. Insert a new Sheet into an existing Workbook
13. Delete the renamed Sheet.
14. Prepare an Attendance sheet of 10 students for any 6 Subjects of your syllabus. Calculate their total attendance, total percentage of attendance of each student & average of attendance, if formulae for calculating grade based on percentage.
15. Create a worksheet on Students list of any 4 faculties and perform following database functions on it.
 - a. Sort data by Name
 - b. Filter data by Class
 - c. Subtotal of no. of students by Class.
16. Apply themes and layouts to power point slides and insert pictures. Graphics, shapes, and tables into presentation.
17. In power point slide make use of adding transitions with sound effect and animation & Working with master Slides.

File/ Folder Management

1. Create folder(s) and file(s) using different ways.
2. Apply different types of copy/cut/paste options.
3. Managing the desktop icons, screen resolution and backgrounds.
4. Making shortcuts to your files/folders on desktop.
5. Compress a folder and mail it to your own self.
6. Extract a zipped file to a folder in E drive.
7. Convert doc to pdf and pdf to jpg.

30
(2 Hrs Each)

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Collaborative online working

1. Create a mail-id for yourself in any one of the facilities available online.
2. Host a meeting on zoom/Google meet, share the screen/pdf/documents, use board/annotations.
3. Host a meeting on Google meet, and record it on zoom.
4. Create a Google sheet, share it with 6 more participants and work simultaneously.
5. Create a Google doc, apply different types of formatting.
6. Create a Google form for youth festival to input their name, class, contact number and event participated and save the data to a Google sheet.
7. Create a Google slide to make certificate for different names in the above program using autocrat.

Project/ Field trip:



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Part C-Learning Resources

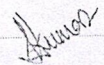
Text Books, Reference Books, Other resources

Suggested Readings:

- Sinha P.K., Sinha Priti, "Computer Fundamentals", BPB.
- Alexis Leon & Mathews Leon "A Beginners Guide to Computers", Vikas Publishing House Pvt. Ltd.
- Mohan P., Fundamentals of Computers, Himalaya Publishing House.
- Sukhwinder Singh , Gaurav Kumar, Kanwalpreet, "Information Technology Skill Development", Twenty first Century Publications.
- Working in Microsoft Office, Ron Mansfield, TMH Publishing Company Ltd.
- Learning Computer Fundamentals, MS Office and Internet & Web Tech., Dinesh Maldasani, Firewall Media.
- G Suite for Dummies, Paul mcfedries, Wiley.

Suggested equivalent online courses: e-reading:

- <http://egyankosh.ac.in/handle/123456789/9489>
- https://workspace.google.com/intl/en_in/training/
- http://www.itdesk.info/handbook_using_computer_managing_files.pdf
- <https://www.coursera.org/courses?query=microsoft%20excel>
- <https://www.coursera.org/projects/googlecloud-google-drive-getting-started-5bus3>
- https://www.tutorialspoint.com/computer_fundamentals/computer_fundamentals_tutorial.pdf



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