NIELIT Accr No: O3326 (J&K and Central Govt Approved Course)

National Institute of Electronics & Information Technology (NIELIT)
Department of Ministry of Electronics and Information Technology
Government of India.

COMPETENCY BASED CURRICULUM

Six Months Certificate Course In Computer Applications (CCCA)

Under

National Institute of Electronics & Information Technology Srinagar – J&K
(DEEMED TO BE UNIVERSITY - Under Distinct Category)

NEILIT- CCCA This course is designed to prepare technicians with specialized skills, knowledge and attitude to work in Computer Applications, finance and accounting field. Obtain understanding of the concepts of Information Technology and its applications. The course is aimed at skill development in masses, students, employees in professional sectors at middle level. The course may also be considered as an ideal course for re-skilling of an individual and technological advancement. After going through the course, an individual is expected to be equipped with not only the office automation skills but also with the understanding of the latest technologies.

1. Name of the Group : Computer Applications & Information Technology
2. Course Code : CCCA
3. Course Fee : 7500/- Full Course Fee
4. Duration : 200 Hours
5. Qualification : 10th
6. Certification Awarded : NIELIT Srinagar - Ministry of IT –Govt of India.
7. Course Coordinator : Zaffer Ahmad Makhdoomi, Executive Director.+91-7006570529.

Modules Covered

Code	Module	Mandatory/ Optional	Mode
M1	IT Tools & PC Applications (PC Application)	Mandatory	Theory + Lab
M2	Advanced Tally Prime with GST , TDS , TCS and Payroll	Mandatory	Theory + Lab
M3	Computer Networks and Protocols Configuration	Mandatory	Theory + Lab
M4	Assignment Work	Mandatory	

1	Examination Cycle	Quarter 1	Quarter 2	Quarter 3	Quarter 4
		February	May	August	November
2	Examination Venue or Center	NIELIT Srinagar (University)			

Fastrack Institute of IT- NIELIT Center Hawal Srinagar J&K
Hawal Chowk Srinagar 190011- J&K. Ph.: +91-7006570529
website: www.fastrackinstitute.in

Detailed Syllabus Module 1: IT Tools and PC Applications		
1	Introduction to Computer	Introduction to Computer and Evolution of Computers & its applications, IT gadgets and their applications, Basics of Hardware and Software, Central Processing Unit, Input devices, Output devices, Computer Memory & storage, Application Software, Systems Software, Utility Software, Open source and Proprietary Software, Mobile Apps.
2	Number System & Computer Codes	Binary number system, Binary to Decimal Conversion, Decimal to Binary Conversion, Octal number system, Octal to Decimal Conversion, Decimal to Octal Conversion, Hexadecimal number system, Hexadecimal to Decimal Conversion, Decimal to Hexadecimal Conversion, ASCII , BCD, Unicode, EBDIC
4	Introduction to Operating System:	Operating System, Basics of Operating System, Booting process, Relation between System software and Application software, Task Bar, Icons & shortcuts, running an application, Operating System simple setting, using mouse and changing its properties, changing system date and time, changing display properties, to add or remove Program and its features, adding, removing &sharing Printers, File and Folder management, types of file extensions, System tools – Disk cleanup, Disk defragmenter.
5	Word Processing (MS Word Latest Version)	Word Processing Basics, Saving, Closing, Opening an existing document, Title Bar, Menu Bar, Toolbars & Sidebar, Save and Save As, Using the Help. Page Setup, Page Layout, Borders, Watermark, Print Preview, Printing of Documents, PDF file and Saving a Document as PDF file. Editing Text, Text Selection, Cut, Copy and Paste, Font, Color, Style and Size selection, Alignment of Text, Undo & Redo, AutoCorrect, Spelling & Grammar, Find and Replace. Formatting the Text, Creating and using user defined Styles, Format Painter. Paragraph Indentation, Bullets and Numbering, Change case, Header & Footer, Table Manipulation, Insert & Draw Table, Changing cell width and height, Alignment of Text in cell, Delete / Insertion of Row, Column and Merging & Splitting of Cells, Border and Shading, Mail Merge, Table of Contents, Indexes, Adding Comments, Tracking changes, Macros, Introduction to Google docs.
6	Spreadsheet Advanced MS Excel	Elements of Spread Sheet, Creating of Spread Sheet, Concept of Cell Address [Row and Column] and selecting a Cell, Entering Data [text, number, date] in Cells, Page Setup, Printing of Sheet, Saving Spreadsheet, Opening and Closing, Manipulation of Cells & Sheet, Modifying / Editing Cell Content, Formatting Cell (Font, Alignment and Style), Cut, Copy, Paste & Paste Special, Changing Cell Height and Width, Inserting and Deleting Rows, Column, AutoFill, Sorting & Filtering, Freezing panes. Conditional Formatting. Formulas, Functions and Charts, Using Formulas for Numbers (Addition, Subtraction, Multiplication & Division), AutoSum, Functions (Sum, Count, Max, Min, Average),Sort, Filter, Advanced Filter, Database Functions (Dsum, Dmin, Dmax, Dcount, Dcounta), What-if Analysis, Pivot table Charts (Bar, Column, Pie, Line), Data Validation. OLE , Vlookup , Hlookup, PMT Function.

7	Presentation PowerPoint	Creation of Presentation, Creating a Presentation Using a Template, Creating a Blank Presentation, Inserting & Editing Text on Slides, Inserting and Deleting Slides in a Presentation, Saving a Presentation, Inserting Table, Pictures and Other Objects, Resizing and Scaling an Object. Creating & using Master Slide, Presentation of Slides , Choosing a Set Up for Presentation, Running a Slide Show, Transition and Slide Timings, Automating a Slide Show, Enhancing Text Presentation, Working with Color and Line Style, Adding Movie and Sound, Adding Headers, Footers and Notes, Printing Slides and Handouts.
8	Urdu In page Writing & Phonetic Layouts	Introduction, Uses, Collect for output, Import & Export, Lock Guide, Preferences (Application, Document, Typographic, Story Editor), Style Sheets, Define Colors, Index Entry, Edit Links, File, Edit, View, Format, Insert Symbols, Utilities, Urdu software, How to run Urdu software, Urdu software interface, Text box, Picture box, Graphic box, Line, Guides, Text chain, Formatting Text, Master Page, Ribbon, Printing, How to make attractive headlines, how to layout a book, Urdu English Dictionary Layout, Ghazal layout, CorelDraw with Urdu software, Use of mathematical equation, Arabic/Persian with Urdu, Web menu, Symbol menu, Window menu, Help menu, How to make internet file, Additional features, short-cut keys, Keyboard preference
8	Working With Compression Utilities and Tools	WinZip, PKZIP, Concept of compression, Defragmenting Hard, disk using defrag, Scan Disk for checking disk space, lost files and recovery, Formatting Hard disk, Floppy Disk, Setting System Date and Time, Antivirus Package CD Writing Software – Nero etc. User Management: overview of user account, managing user account and password security: adding user, setting and changing password, changing picture of user, deleting the user, setting account restriction for the user, renaminga local account.
	Command Line Interface	What Is Disk Operating System, What is Commond.Com, IO.sys, MSdos.sys , Internal Command & External Command, File Management Command : Copy Con, Type, Rename, Del, Copy, Copy,, Attrib, Backup, Restore, Find , Sort , More, Chkdsk,, Restore, Find, Sys, Type, Del, Data, Time, prompt. Directory Command: Dir, MD, RD, Tree, Path,
	Reference	P.K. Sinha and P. Sinha, " Foundations of Computing" , BPB Publication, Sagman, "MS Office for Windows 2023", Pearson Education, ITL Educational Society, "Introduction to IT", Pearson Education, Miller M, "Absolute Beginners Guide to Computer Basics", Pearson Education,

Detailed Syllabus Module 2 : Tally Prime With GST, TDS , TCS and Payroll		
	Introduction to Tally	Introduction, Types of Accounts , Accounting Principles or concepts , Mode of Accounting, Rules of Accounting ,Double-entry system of bookkeeping, Company Creation, Shut Company , Delete Company, Alteration, Create Group of Company.
	Account and Inventory Master	Company & Accounts Master : Company Features , Configuration ,Getting functions with Tally prime ,Creation / setting up of Company, Accounting Masters , Chart of Groups , Groups , Multiple Groups , Ledgers , Multiple Ledgers,

		Inventory Masters: Stock Groups, Multiple Stock Groups, Stock Categories, Multiple Stock Categories, Units of Measure: Simple Compound and Alternate, Stock Items. F12 and F11
	Advanced Transaction Vouchers	Payment, Receipt, Contra, Sales. Purchase Debit Note, Credit Note. Journal. Stock Journal, Physical Stock Voucher, Manufacturing Journal, Purchase Order, Sales Order, Goods Receipt Note, Delivery Note, Rejection Outwards, Rejection Inwards, Voucher Classes and Bill Numbering System.
	Advance features	Bill-wise details, Cost centers and Cost Categories, Multiple currencies, Batch-wise details, Bill of Materials, Batch-Wise Details Different Actual and Billed Quantities, Price Lists, Zero-Valued Entries, Additional cost details.
	POS In Tally	Point of Sales : Single Mode and Multimode , POS Register
	TDS(Tax Deducted At Source)	Understanding TDS, Creating TDS Masters, Practical Examples, TDS Payment
	TCS (Tax Collect At Source)	Understanding TCS, Creating TCS Masters, Practical Examples, and TCS Payment.
	GST (Goods and Service Tax	About Goods and Services Tax (GST), Activating Tally in GST, Setting Up GST (Company Level, Ledger Level or Inventory Level), GST Taxes & Invoices, Understanding SGST, CGST & IGST, Creating GST Masters in Tally, Updating GST Number for Suppliers, Practical on Intra-State Purchase Entry in GST (SGST + CGST), Practical on Inter-State Purchase Entry in GST (IGST), GST Purchase Entry for Unregistered Dealer in Tally, Reverse Charge Mechanism (RCM) Entry for GST in Tally, Updating GST Number for Suppliers, Practical on Intra-State Sales Entry in GST (SGST + CGST), Practical on Inter-State Sales Entry in GST (IGST), Printing GST Sales Invoice from Tally ERP9 Software, Preparing of Excel Report Using Tally Prime , Import and Export Entries In Tally Prime Under GST.
	Data Security and User Management Level	Tally vault, Security controls, Tally Audit, Backup and restore, Split company data Import and export of data, Create a Company Logo.
	Payroll Accounting:	Employee Creation , Salary Define , Employee Attendance Register , Pay Heads Creation Salary Report , Earning and Deduction , Advance Salary , Payment Advice , Other Pay Head : Basic , HRA, DA , TA and Professional Tax Calculation , Calculation Mode : Flat rate , Production , On Attendance , User Defined, Employee Profile and Export
	Adjustment , Closing and Opening of Final Accounts in Tally	Financial Statements - Trading Account, Profit & Loss Account , Balance Sheet , Accounts Books and Reports Inventory Books and Reports Exception Reports
	TDL In Tally	Import TDL
	Printing In Tally	Printing of Final Accounts, Voucher Printing , Paper Setting , Orientation

Reference Book:

1. Am Ahmad Financial Accounting Using Tally
2. Tally Accounting AK Nandani

Detailed Syllabus Module 3 Computer Networks and Protocols Configuration		
1	Computer Networks	Network Concepts: Introduction to Network, characteristics, need, types of networks on the basis of area coverage: LAN, WAN, MAN; Advantages and Disadvantages of networks; Network Topologies: bus topology, ring topology, star topology, tree topology, mesh topology and hybrid topology. Network Models: Peer-to-Peer, Introduction to Networks , LAN, WAN , IP Addressing , Client – Server , Topology,
2	Transmission Media	Twisted pair , Co-axial cable , Fiber optics , Microwaves , Radio Waves RJ 45 RJ 11
3	Network Devices	HUB, Switch, Router, Gateway , Bridge
4	Web Fundamentals	History of Internet, Basic Services, search engines : Web browsers , Web Servers, WWW , DNS, URL
5	Email & Networking Protocol	Basics of Email, Mail Box –Inbox and Outbox, SMTP Protocol, POP3 Protocol, DNS, FTP, Telnet, DHCP, HTTP, IP address: Introduction, IP address format, classes of IP Address, subnet address, Subnetting calculation, Configuration of IP Address in PC. PING Utilities.
6	Practical Lab	Network Administration using Simulation 1. Configure IP Address 2. LAN Using Hub/Switch 3. DHCP Server Simulation 4. Data Sharing over LAN 5. Remote Assistance 6. DNS Protocol Simulation 7. HTTP Protocol Simulation 8. Routing Protocol Using Simulation
7	MySQL	Data Base Operations Database, Relational Database, Integrity. Operations: Creating, dropping, manipulating Entry Form, Reports. Practicing these concepts using MYSQL.

Reference Book:

1. Internet Secrets (Internet technology and web design) Publisher: Choice International By Shailendra Mishra