Diploma
in
Computer Applications, Business
Accounting and Multilingual DTP-CABA-MDTP

Guideline & Syllabus

राष्ट्रीय उर्दू भाषा विकास परिषद्
قومی کونسل برائے فروغ اردو زبان
NATIONAL COUNCIL FOR PROMOTION OF URDU LANGUAGE (NCPUL)
Department of Higher Education,Ministry of Education, Govt. of India
Farogh-e-Urdu Bhawan, FC-33/9, Institutional Area,Jasola, New De lhi-110 025
Tel.No.: 011-49539000 Fax : 49539099
Website:www.urducouncil.nic.in
E-mail:urducouncil@gmail.com

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Preface

National Council for Promotion of Urdu Language (NCPUL) is mandated to take action for making available in Urdu language the knowledge of scientific and technological development as well as knowledge of ideas evolved in the modern context. In the emerging information technological scenario, it was necessary that this technology is made available to the Urdu speaking population of the country with a view to transform Urdu speaking population into employable technical workforce.

It was in 1999 when a humble beginning was made and some Multilingual DTP Computer Centres were set up at select locations. From the beginning, attempt was made to provide standard course contents and ensure quality in computer education at par with the quality of agencies dedicated to computer awareness and education in the country. In this context, NIELIT, which is an approved Government of India agency for imparting computer education in non-formal sector, was engaged for conducting examination and certification. There has been a demand that course contents need to be upgraded. Therefore, the NCPUL has entered into a MoU with NIELIT and delegated the powers of regulating academic standards and examinations to it. This course is now **Computer Applications, Business Accounting & Multilingual DTP (CABA-MDTP)** and it is hoped that course will enable the students pursuing this course to get CCC, CABA-MDTP Diploma and 'O' Level Certification from NCPUL and NIELIT. The important change in the eligibility will enable students with+2 qualification to pursue 'O' Level Diploma and those who are with Matric or equivalent qualification to pursue CCC and CABA-MDTP.

I am sure that the new courseware of NIELIT will meet the requirements of the students and NCPUL will be in a position to discharge its mandate of linking Urdu to the contemporary requirements particularly, in the context of ever increasing use of information technology in our life.

Prof. Dhananjay Singh
(Director)

NCPUL-IN BRIEF

Introduction

The National Council for Promotion of Urdu Language (NCPUL) is an autonomous body under the Ministry of Education, Department of Higher Education, Government of India. Set up to promote, develop and propagate Urdu language, Council started its operation in Delhi on April 1, 1996. In its capacity as the National Nodal Agency for the promotion of the Urdu language NCPUL is the principal coordinating and monitoring authority for promotion of Urdu language and Urdu education.

Thrust Area

- To promote, develop and propagate Urdu language.
- To take action for making available in Urdu language the knowledge of scientific and technological development as well as knowledge of ideas evolved in the modern context.

Objective

- To undertake the production of literature in the Urdu language, including books on science and other branches of modern knowledge, the children's literature textbooks, reference works, encyclopedia, dictionaries etc.
- To collect and evolve technical terms relating to various disciplines of knowledge in order to enrich the Urdu language.
- To undertake and provide for publication of journals and periodicals in furtherance of its objects.
- To arrange for the sale of publications and their exhibitions both inside and outside the country on from time to time.
- To promote and help in development of computerization with a view to develop the Urdu language to meet the advanced technological requirements of the age.
- To formulate/implement schemes and projects for the teaching of Urdu language through the medium of English and Hindi and other modern Indian Languages including, teaching through the correspondence courses.
- To liaise with the State Governments and other agencies in matters relating to promotion and development of the Urdu language.
- To provide financial assistance and guidance to Non-Government Organizations for propagation of the Urdu language.
- To co-ordinate the activities of the state Urdu academies.

NIELIT CHANDIGARH – IN BRIEF

Location

NIELIT Chandigarh, an autonomous scientific society under the administrative control of Ministry of Electronics & Information Technology (MoE&IT), is operating from Permanent Campus at Ropar, Birla Farms ,BadaPhull, Rupnagar (Ropar)-140001 (Punjab) with Facility at Chandigarh.

Introduction

NIELIT Chandigarh, a premier institute of the region, was established in 1978 to provide professional services in the areas of Electronics and Information, Technology (IECT). This Centre has been working as a leader in the development of industry based Skill manpower in latest and emerging technologies. This Centre focuses on providing affordable education & training, promoting the culture of use of technology and providing a complete customized IT solution & products to our clients and students. It is an IT and Electronics Organisation with clear cut strategies and its various operations are aimed at giving its customers a total package of IT Solutions and products. The Centre ensures cost effective, time to market solutions through a highly skilled work force driven by strong design principles, highest levels of quality and ethical business practices and constantly strive to delight our customers through excellence in Service Delivery.

Thrust Area

NIELIT, Chandigarh strives to impart training in the areas of Information, Electronics & Communication Technology (IECT)by providing training in skill-oriented industry-driven programs.

Objectives

- Disseminate knowledge on all aspects of IT and allied subjects.
- Provide Quality Education and Training to prepare individual for Technology driven business environment, effectively.
- Provide quality education to participants for upgrading their technical skills to meet the demand of rapid changes in technology by the skilled and dedicated IT faculty in an environment that is conducive to learning by providing good infrastructure.

NCPUL- NIELIT Advantage

1. Industry Specific Quality Education in Modular form to supplement the formal Education.
2. Rich and variegated Instructional Experience of NIELIT.
3. Vast NCPUL-NIELIT network all over the country.
4. Centralized Nation –wide Examination & Certification.
5. Continuous Revision of Course Curriculum by NIELIT and Addition of New Courses on advice from Advisory Committee.
6. Close monitoring and strict enforcement of NCPUL-NIELIT norms at its training Centre.
7. Student can get certified for NIELIT CCC Course after undergoing CABA-MDTP Programme.

Table of Contents

PART – A

(CABA-MDTP MANAGEMENT GUIDELINES)

1. MANAGEMENT OF CABA-MDTP CENTRE

1.1 GUIDELINESS FOR MANAGEMENT OF CABA-MDTP CENTRE

I. NIELIT Chandigarh will provide technical manpower to conduct training programmes.

II. NCPUL Centre will provide all necessary infrastructures required to conduct Training Programmes.

III. The Examination for CABA-MDTP Course will be conducted by NIELIT Chandigarh, twice in a year in June and December of every year.

IV. Examination and Certification of 'CCC' Course shall be carried out by NIELIT HQ.

V. NCPUL Centre shall provide Centre Incharge at each Centre for day-to-day monitoring of activities of the Centre.

VI. NCPUL Centre shall ensure the safety and security of the Centre and the hardware infrastructure provided there.

VII. Miscellaneous expenses (Internet/Telephone/Postal/ Insurance etc.) shall be borne by NCPUL Centre.

VIII. Examination fee for NIELIT 'CCC' Examination shall be directly paid to Regional Centres of NIELIT Chandigarh.

IX. Practical examination will be conducted by the NCPUL Centre and marks will be sent to NIELIT Chandigarh.

X. Project Evaluation will be carried out by the NCPUL Centre. Marks and Project Completion Certificate will be sent to NIELIT Chandigarh.

XI. In case Senior Faculty proceeds on leave, his/her lectures will be taken by the other Senior/Junior Faculty as per arrangement made by Supervisor/Centre Incharge.

XII. In case the Senior Faculty-cum-Supervisor proceeds on leave, he/she will submit the leave application to the CentreIncharge. In case the other faculty proceeds on leave, he/she will submit the leave application to the Senior Faculty-cum-Supervisor and who shall forward it, after recommendation, to the Centre Incharge for sanctioning any kind of leave.

XIII. In case the Junior Faculty proceeds on leave, he/she will give the status of fee collected to the Supervisor. All duties other than teaching will be performed by the Supervisor. Supervisor will take assistance of Urdu Teacher in this regard.

XIV. Fee will be collected by the Supervisor. At end of the day he/she will give the status report to the Centre Incharge.

XV. Stock Record, leave application record, academic record etc. will be kept by the Junior Faculty and the Centre Incharge will verify the record every six months.

1.2. GUIDELINES FOR CENTRE INCHARGE

1. The Senior and Junior Faculty will report to the Centre Incharge. The Centre Incharge will maintain attendance register of Senior and Junior Faculty and Urdu Teacher.
2. The Centre Incharge will maintain the records of the infrastructure provided by NCPUL.
3. The Centre Incharge will send the reports in the specified format as and when desired. The reports will be sent in time.
4. The Centre Incharge will submit the Examination forms of CCC of all the students enrolled for CABA-MDTP course.
5. The CentreIncharge will strictly observe deadlines of sending registration/examination forms of CABA-MDTP course, NIELIT CCC Examination.
6. The Centre Incharge will monitor performance of the Senior and Junior Faculty and Urdu Teacher and maintain discipline in the Centre.
7. The Centre Incharge will monitor the records of the students and their result.

1.3. GUIDELINES FOR SUPERVISOR

1. One of the Senior Faculties will be designated as Supervisor cum Senior Faculty.
2. In the beginning of each session, supervisor must provide students with a copy of the Guidelines and Syllabus concerning major objectives of the course, content to be covered, weight-age of different components, pass percentage and grading scheme.
3. At the beginning of each term, each supervisor is responsible for explaining, in writing, the practice of treatment of absences. Every student of the centre is required to attend his classes regularly and punctually. Student's will be required to put a minimum of 75% attendance in class failing which they may not be allowed to sit in examination.
4. Supervisor will ensure smooth supply of course books to each student to each student module wise.
5. A computer system shall be assigned to particular group for each semester and students shall be directed to use the systems allotted to them.
6. A complete record of all classes and lab exercises done by a student shall be kept as his/her record. Internal assessment will be done on the basis of these exercises. Students should maintain the record of Class Exercises on notebook and Lab Exercises on a CD. These exercises should be shown to the instructor, supervisor or visiting team.
7. Student found guilty of academic misconduct, including plagiarism and cheating either directly or indirectly through participation or assistance are to be dealt with stemly by the supervisor.
8. Supervisor will effectively monitor the corpus fund of the Centre and maintain proper entries in a register.
9. Supervisor will effectively interact with students after completion of

each module and if required arrange for guest lectures on the subject.

10. Supervisor will act as a placement coordinator of student. He will do all liaison work with local office/firms for gainful employment to students.

1.4. GUIDELINES FOR FACULTY

1. Each batch consisting of 40 students shall be grouped into two groups of 20 students each. One group will attend theory class and the other group will attend practical class simultaneously.
2. One of the senior faculty as designated by NIELIT Chandigarh shall act as Supervisor. He/she shall prepare a detailed timetable for each module in advance and provide one copy to each student.
3. According to the Time Table, lectures shall target intensively on topics covering the chapters mentioned in prescribed books and syllabus.
4. On completion of theory classes, assignment shall be given to students to be completed during theory classes. The assignment shall consist of technical quizzes/ objective type questions/fill in the blanks/simple exercise.
5. In case of any Hardware/Software failure of a computer system the instructor may adjust students with other groups till the fault is rectified.
6. Practical will be done only in the computer lab on topics completed during theory classes.
7. Every student shall get the opportunity to complete his assignment and exercise on computer and preserve a copy of it in a storage media.
8. During the two hours practical classes, three students will share one computer but each student should at least get half an hour to use the computer in order to complete his/her assignment and exercises.
9. Each faculty shall work for at least 8 hours per day including theory and practical classes as per syllabus.
10. The faculty shall maintain a register for attendance of the students. The faculty will also conduct the tests for the students and maintain their progress in the register.
11. Faculty shall also maintain the register indicating working position of the hardware and software on daily basis and inform the supervisor in case of any fault.

1.5 GUIDELINES FOR PART TIME TEACHER OF URDU DIPLOMA COURSE

1. The Urdu teacher shall teach for all days from 1.00 PM to 2.00 PM to all CABA_MDTP students.
2. The teacher shall maintain register for the attendance of the learners.
3. The teacher will evaluate the response sheets and also conduct practical tests and shall send their progress reports to the council.
4. The teacher will not only teach the syllabus of the course but will also provide other references related to the subject.
5. The teacher will report to Senior Faculty cum Supervisor and assist I Record Keeping.

6. Other details may be seen in the programming guide of Urdu diploma.

1.6 LIBRARY RULES

1. To borrow a book or visit the Library the student must become the Library member.
2. Students are allowed to borrow books as per availability and regulation.
3. Students can avail Library facility during the working hours only.
4. Reference books are accessible only in the Library and will not be issued.
5. Student shall be responsible for the lass of books, in kind or cash.
6. Students are expected to maintain complete silence inside the Library.
7. All course books will be supplied to students free of charge in accordance with the syllabus. The books will be supplied from Module to Module at the beginning of each Module.

PART – B

(ABOUT THE COURSE – CABA-MDTP, CCC)

2. NCPUL-NIELIT CERTIFICATION

2.1 DIPLOMAIN COMPUTER APPLICATIONS, BUSINESS ACCOUNTING AND MULTILINGUAL DTP (CABA-MDTP)

This CABA-MDTP one-year diploma course has been designed for transformation of Urdu speakers into productive human resources and making them part of the employable technological work forcein the emerging IT scenario and penetration of computer education to grass root level. The contents of this course have been enriched with

- Programming Techniques
- Developing Database Applications
- Accounting Package
- Web-Designing Tools
- Course in Urdu and DTP Software:
    - Introduction to Multimedia and its Applications
    - Inpage
    - Coreldraw
    - Photoshop
        - Urdu & Hindi DTP

The Course contents of CABA-MDTP include have been designed keeping in view that there will be number of career options possible for an individual after successfully completing the course. After 1st semester of CABA-MDTP diploma examination, the students have option for appearing in NIELIT CCC examination. The student who has undergone training in CABA-MDTP diploma can get certificates of these courses viz CABA-MDTP and NIELIT CCC after successfully passing the respective examinations.

COURSE STRUCTURE

This course consists of six theory modules, one practical and one project. The structure of the course is indicated below:

Semester	Module Code	Revised syllabus Modules:	Hours
1	M1	M1: FUNDAMENTALS OF INFORMATION TECHNOLOGY	150
	M2	M2: INTERNET TECHNOLOGY AND WEB DESIGNING	150
	M3	M3: FINANCIAL ACCOUNTING USING TALLY AND PERSONALITY DEVELOPMENT	150
2	M4	M4: EMERGING TRENDS IN IT	150
	M5	M5: MULTI-LINGUAL DTP	150
	M6	M6: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING USING PYTHON	150

Students who have passed 10th class, but are yet to pass 10+2 class, will do project work on DTP in the institute or outside the institute. The project work is to done by the students as fulfilment of CABA-MDTP Course.

2.2 Certificate Course in Computer Concepts- (CCC)

Introduction: This course is designed to aim at imparting a basic level IT Literacy programme for the common man. This programme has essentially been conceived with an idea of giving an opportunity to the common man to attain computer literacy thereby contributing to increased and speedy PC penetration in different walks of life. After completing the course the incumbent should be able to the use the computer for basic purposes of preparing his personnel/business letters, viewing information on internet (the web), receiving and sending mails, preparing his business presentations, preparing small databases etc. This helps the small business communities, housewives, etc. to maintain their small accounts using the computers and enjoy in the world of Information Technology. This course is, therefore, designed to be more practical oriented.

Eligibility:
No minimum qualification is required for applying and appearing for the examination in Course on Computer Concepts [CCC].

Duration:
The total duration of the course is 80 hours, consisting of

(i) Theory - 32 hours
(ii) Practical - 48 hours

Examination:

(i) Examination for the certificate course will be conducted by the NIELIT(formerly DOEACC Society) on monthly basis.
(ii) The examination fee for CCC is ₹500.00 + GST as applicable which is to be pay online through EFT/RTGS/CSC-SPV/Online(Credit Card/Debit Card/Net Banking) while filling up the online examination form.

PART – C

DETAILED SYLLABUS

(CABA-MDTP,CCC)

3. DETAILED SYLLABUS (Course Wise)

3.1 DIPLOMA IN COMPUTER APPLICATION, BUSINESS ACCOUNTING AND MULTILINGUAL DTP(CABA-MDTP)

The Computer Applications, Business Accounting and Multilingual Desktop Publishing (CABA-MDTP) is a one-year Diploma course that has been designed for transforming the Urdu speakers into productive human resources in the field of Information Technology. Further the course would empower the participants to become part of the enriched technological work force that is in demand in the Information Technology Industry these days.

The Urdu Council has made every possible effort to devise the course as per the need of the "Tech Savvy Industry" that is in constant look out for skilled manpower which could be directly utilized into operations without any formal training. This venture is a sincere effort by the Council to bridge the gap between "The Academia" and "The Industry" on the whole.

Detailed Syllabus

M1: FUNDAMENTALS OF INFORMATION TECHNOLOGY

Objective of the course:

This module of the Course aims to impart the basic technical knowhow the student should possess in order to operate the computer. The student completing this module of the CABA-MDTP course should be able to perform daily jobs pertaining to word processing for office related documents, interpretation of data by creating and analysing the spread sheets and making small presentations that are required to be accomplished in any IT enable office. Further this module offers the student insight with regards to the concept of internet and it would also make the students aware with respect to the "Digital India Campaign", by empowering the student about various digital financial tools.

Pre-requisites:

As the course is a fundamental course, no pre-requisite course is needed. It is expected that the student enrolling in the course may have elementary knowledge in English

Duration:

Theory: 60 hrs + Practical: 90 hrs.

Syllabus outline

S.no.	Syllabus Outline	Theory (hrs)	Tutorials (hrs)	Practical (hrs)	Total coverage per module (hrs)
1	**Introduction to computer**	3	--	2	5
2	**PC Assembly operations**	7	2	5	14
3	**Introduction to operating System**	5	2	8	15
4	**Word processing**	10	2	15	27
5	**Spread sheet**	10	2	15	27
6	**Presentation**	5	2	10	17
7	**Database operations**	5	--	5	10
8	**Introduction to WWW**	5	--	10	15
9	**E-mail, Social Networking and e-Governance Services**	5	--	4	9
10	**Digital Financial Tools and Applications**	5	2	4	11
	Total	**60**	**12**	**78**	**150**

Detailed Syllabus

1. Introduction to Computer (5 Hrs)

Computer and Latest IT gadgets, 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.

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

2. PC Assembly and operations (14 Hrs)

Personal computers,Types of Computers, Parts of computer, Front of computer case,back of computer case, Peripherals one can use in various ports, Common tools used in Assembly of computers, Installation for various parts of motherboard, System

Configuration Summary,System BIOS, System Boot Sequence, Installation of Windows and reinstallation

3. Introduction to Operating System (15 Hrs)

Operating System, Basics of Operating System, Bootingprocess, Relation between System software and Application software, Installation of Windows operating System, Installation of Other Software Packages such as Ms Office etc.

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.

4. Word Processing (27 Hrs)

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.

5. Spreadsheet (27 Hrs)

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. Integrating word processor, spread sheets, web pages, Introduction to Google Sheets.

6. Presentation (17 Hrs)

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

7. Data Base Operations (10 Hrs)

Database, Relational Database, Integrity. Operations: Creating, dropping, manipulating table structure. Manipulation of Data: Query, Data Entry Form, Reports. Practicing these concepts using Access.

8. Introduction to Internet and WWW (15 Hrs)

Basic of Computer Networks, Local Area Network (LAN), Wide Area Network (WAN), Network Topology. Transmission media & method of communication, Cabling: straight through and cross over, Introduction to IP Address, MAC address.

Internet, Concept of Internet & WWW, Applications of Internet, Website Address and URL,ISP and Role of ISP, Internet Protocol, Modes of Connecting Internet (HotSpot, Wifi, LAN Cable, BroadBand, USB Tethering). Identifying and uses of IP/MAC/IMEI of various devices, Popular Web Browsers (Internet Explorer/Edge, Chrome, Mozilla Firefox, Opera etc.), Exploring the Internet, Surfing the web, Popular Search Engines, Searching on Internet, Downloading Web Pages, Printing Web Pages.

9. E-mail, Social Networking and e-Governance Services (9 Hrs)

Structure of E-mail, 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, Searching emails, Attaching files with email, Email Signature, Introduction to MS Outlook:Configuration and Usage, Social Networking & e-Commerce, Facebook, Twitter, Linkedin, Instagram, Instant Messaging (Whatsapp, Facebook Messenger, Telegram). Introduction to Blogs, Basics of E-commerce, Netiquettes, Overview of e-Governance Services like Railway Reservation, Passport, eHospital[ORS], Accessing e-Governance Services on Mobile Using “UMANG APP”, Digital Locker, Arogya Setu App.

10. Digital Financial Tools and Applications (11 Hrs)

Digital Financial Tools, Understanding OTP [One Time Password]and QR [Quick Response] Code, UPI [Unified Payment Interface], AEPS [Aadhaar Enabled Payment System], USSD[Unstructured Supplementary Service Data], Card [Credit / Debit], eWallet, PoS [Point of Sale], Internet Banking, National Electronic Fund Transfer

(NEFT), Real Time Gross Settlement (RTGS), Immediate Payment Service (IMPS), Online Bill Payment.

M2: INTERNET TECHNOLOGY AND WEB DESIGNING

Objective of the course:

The objective of this module is to make the student aware about the various technical aspects relating to the internet with a greater coverage comprising of Internet basics, TCP/IP, Internet connectivity and other related issues to Computer Networking and Internet Services. The module intends to cover the programming part related to the Internet and World Wide Web so as to build the web designing and web development aspects related to this field by covering HTML, DHTML, Java Script and PHP /MY SQL in detail. The module ends by providing a brief insight to the candidate with regards to the concepts related to Internet Security and Privacy

Pre-requisites:

It is expected that the student enrolling in this module may have the knowledge of first module of the course.

Duration:

Theory: 60 hrs + Practical: 90 hrs**.**

Syllabus outline

S.no.	Syllabus Outline	Theory (hrs)	Tutorials (hrs)	Practical (hrs)	Total coverage per module (hrs)
1	**Introduction to Internet**	2	--	-	2
2	**TCP / IP- Internet Technology and protocol**	3	2	2	7
3	**Internet Connectivity**	4	2	3	9
4	**Internet Network**	3	-	1	4
5	**Services on the Internet**	3	-	1	4
6	**Current trends on Internet**	3			3

7	**Internet Web programming:** **1) HTML** **2) DHTML (CSS),** **3) java Script,** **4) PHP/MYSQL**	40	8	70	118
8	**Internet Security and privacy**	2	--	1	3
	Total	**60**	**12**	**78**	**150**

Detailed Syllabus

1. Introduction to Internet (2 Hrs)

Internet, Growth of Internet, Owners of the Internet, Anatomy of Internet, ARPANET and Internet history of the World Wide Web, basic Internet Terminology, Net etiquette. Internet Applications – Commerce on the Internet, Governance on the Internet, Impact of Internet on Society – Crime on / through the Internet.

2. TCP/IP – Internet Technology and Protocol (7 Hrs)

Packet switching technology, Internet Protocols: TCP/IP, Router, Internet Addressing Scheme: Machine Addressing (IP address), E-mail Addresses, Resources Addresses

3. Internet Connectivity (7 Hrs)

Connectivity types: level one, level two and level three connectivity, Setting up a connection: hardware requirement, selection of a modem, software requirement, modem configuration, Internet accounts by ISP: Telephone line options, Protocol options, Service options, Telephone line options – Dialup connections through the telephone system, dedicated connections through the telephone system, ISDN, Protocol options – Shell, SLIP, PPP, Service options – E-mail, WWW, Firewall etc.

4. Internet Network (4 Hrs)

Network definition, Common terminologies: LAN, WAN, MAN, PAN, Node, Host, Workstation, bandwidth, Interoperability, Network administrator, network security, Network Components: Severs, Clients, Communication Media, Types of network: Peer to Peer, Clients Server, Addressing in Internet: DNS, Domain Name and their organization, understanding the Internet Protocol Address. Network topologies: Bus, star and ring, Mesh,Tree, Ethernet, FDDI, ATM.

5. Services on Internet (Definition and Functions) (4 Hrs)

E-mail, WWW, Telnet, FTP, IRC and Search Engines, Introduction to Search Engine optimization (SEO),Web hosting, Publishing of Website and Web Updation

6. Current Trends on Internet (04 Hrs)

Intranet and Extranet, Internet Phone, Internet Video, collaborative computing, e-Commerce.

7. Internet Web Programming (118 Hrs)

HTML: Introduction, Basic Structure of HTML, Formatting Tags, HTML Links, Tables, Forms, Frames: Frameset, nested Frames, HTML Images, HTML 5 Introduction, HTML5 New Elements: Section, Nav, Article, Aside, Audio Tag, Video Tag, HTML5 Form Validations: Require Attribute, Pattern Attribute, Autofocus Attribute, email, number type, date type, Range type, HTML embed multimedia, HTML Layout, Iframe

CSS: Introduction to CSS, Types of CSS, CSS Selectors: Universal Selector, ID selector, Tag Selector, Class Selector, Sub Selector, Attribute Selector, Group Selector, CSS Properties: Back Ground properties, Block Properties, Box properties, List properties, Border Properties, Positioning Properties, CSS Lists CSS Tables, CSS Menu Design, CSS Image Gallery

Java Script: Introduction to Client Side Scripting Language, Variables in Java Script, operators in JS, Conditions Statements, JS Popup Boxes, JS Events, Basic Form Validations in JavaScript.

PHP/Mysql: Introduction, Basic Syntax, Operators with Logical statement & Loops: Operators, If –else, if-else-if, nested if, Switch -Case, Loops(while, do-while, for, for each), Arrays , Functions, Forms , Introduction to Database and Mysql, Database Connectivity using Forms and MySQL , Retrieval of Data from SQL Database, practical demo of Web Hosting.

8. Internet Security and Privacy (3 Hrs)

Overview of Internet Security, https, ftps, Secure Electronic Transaction (SET), Secure Socket layer (SSL), Data Encryption, Digital Signature, Digital certificate, Firewall, Security Audit

M3 : FINANCIAL ACCOUNTING USING TALLY AND PERSONALITY DEVELOPMENT
Objective of the course:

The module begins with coverage of basic accounting principles and further intends to provide in depth scope of Financial Accounting package Tally Prime starting with the coverage of the fundamentals of Tally Prime to the advance features of Tally the module provides 5 in detail chapters that offer the mentioned content in detail along with a brief stint into the enhancement of personality skills as well.

Pre-requisites:

It is expected that the student enrolling in this module may have basic knowledge of Computers.

Duration:

Theory: 60 hrs + Practical: 90 hrs**.**

Syllabus outline

S.no.	Syllabus Outline	Theory	Tutorials	Practical	Total
1	**Basics of Accounting**	20	2	--	22
2	**Fundamentals of Tally prime**	7	-	8	15
3	**Maintaining Company Data**	7	2	15	24
4	**Vouchers in Tally**	7	2	15	24
5	**Display and reporting**	7	3	20	30
6	**Advance features in tally**	7	3	20	30
6	**Professional Personality Skills**	5	--	--	5
	Total	**60**	**12**	**78**	**150**

Detailed Syllabus

1. Basics of Accounting (22 Hrs)

Objectives of Financial Accounting, Advantages and Limitations, Concepts and Conventions, Double entry System, Accounting Equations, Classification of Accounts, Real, Nominal and Personal Accounts, Principles. Basic Terms used in Accounts like Debtors, Creditors, Assets, Liabilities, Capital, Drawings, Receivables, Payables. Basic steps in Accounts Compilation, Preparation of Journal, Ledger, Trail Balance, Final Accounts i.e. Trading Account, Profit and Loss Account and Balance sheet, Financial Statement, Concept of Open invoicing.

2. Fundamentals of Tally Prime (15 Hrs)

Introduction to Tally, Tally Fundamentals, Features of Tally, Installation and start-up of Tally, Tally screen components, Mouse/Keyboard Conventions, switching between screen area- Ctrl-n & Ctrl-m, Quitting Tally.

3. Maintaining Company Data (24 Hrs)

Creation and Modification operations, Accounting and Inventory, Chart of accounts – Group, Ledger, Introduction to F11- Features, Introduction to F12- Configurations, maintaining stock details, Inventory Masters, Displaying and altering stock group, Creating and altering multiple stock categories, Creating and altering unit of measure.

4. Vouchers in Tally (24 Hrs)

Accounting Vouchers, Contra Voucher, Payment Voucher, Receipt Voucher, Journal Voucher, Sales Voucher, Credit note Voucher, Purchase Voucher, Debit note Voucher, Reversing Journal, Memo Voucher, Physical Stock Voucher etc., Delivery Note, Order Processing, Stock journal, Receipt Note.

5. Display and Reporting (30 Hrs)

Reports, Statutory Reports (GST, TDS, TCS), Balance sheet, Profit & Loss A/C, Trial Balance, Sales Register, Purchase Register, Journal Register, Cash Book, Bank Book and Ledger, Financial MIS Report, Group Summary, Group Vouchers, Statement of Accounts, Inventory Reports.

6. Advance Features in Tally (30 Hrs)

Technology Advantages of Tally, Tally Vault, Security control, Tally Audit, Backup and Restore, split company data, Export and Import of data, Bills of Materials (BOM).

7. Professional Personality Skills (05 Hrs)

Industry insight, Managing Professional relations, Preparation of CV, Interview techniques (Technical and HR Interview), Frequently asked questions (FAQs), Mock interview sessions.

M4: EMERGING TRENDS IN IT

Objective of the course:

This module comprises of plethora of technologies that the student must be aware of what other avenues exist in the field of information technology which may be pursued by the student to seek a job or further venture in to higher studies as per his developed interest after completing this module. Every topic of the module has been designed so that the student comes to know about the introductory part of the technology, subsidiary streams if any, along with its features and types, advantages and disadvantages / benefits and some examples of the technology.

Pre-Requisites:

It is expected that the student enrolling in this module may have basic knowledge of Computers.

Duration:

Theory: 60 hrs + Practical: 90 hrs**.**

Syllabus outline

S.no.	Syllabus Outline	Theory	Tutorials	Practical	Total
1	**Cyber Security**	6	2	10	18
2	**IoT**	6	2	9	17
3	**Digital Payments**	6	2	9	20
4	**Digital Marketing**	10	2	9	15
5	**Block Chain**	6	2	9	15
6	**Cloud Computing**	6	2	9	15
7	**Big Data Analytics**	6	2	9	15
8	**AI/ ML /AVR/RPA**	14	2	10	28
	Total	**60**	**16**	**74**	**150**

Detailed Syllabus

1. **Cyber Security** **(18 Hrs)**

What is Cyber Security, CIA triad, AAA Concept, Malwares and Antiviruses, System Security, Network Security, Web application Security, Mobile and wireless Security, Cyber Crime and Cyber Frauds, Dos and Don'ts Associated with Cybercrimes and frauds, Various streams associated with Cyber Security, Cyber Laws, Plagiarism, Copyright and Intellectual Property Rights.

2. **Internet of Things (IOT)** **(17 Hrs)**

What is IOT, Evolution of IOT, and Ecosystem of IOT, Sensors in IOT, Applications of IOT, Advantages and Disadvantages of IOT, Industrial IOT, Smart Cities and Smart Homes.

3. **Digital Payments** **(20Hrs)**

Digital India concept, Digidhan Mission of India, Digital payment methods: Banking Cards, Unstructured Supplementary Service Data (USSD), Adhaar enabled payments System (AEPS), Unified Payments Interface (UPI), BANK Pre paid cards, Point of Sale terminals (POS), Internet Banking, Mobile Banking, Micro ATMs, Securing Digital Payments.

4. Digital Marketing (15 Hrs)

Concept of Digital Marketing, Evolution of Digital Marketing, Benefits of Digital marketing, Traditional versus Digital marketing differences, Types of Digital Marketing, how to create a digital advertising plan, different digital advertising platforms, Social media marketing, Email marketing, Website analytics for digital marketing

5. BlockChain (15 Hrs)

Blockchain benefits and challenges, Blockchain components and applications, Blocks, transactions, distributed ledger, Mining Bitcoin on blockchain, Ethereum, Solidity: Language for contracts, dApps, Types of Blockchain: Private, Public, Consortium, Introduction to Hyperledger and its projects and applications.

6. Cloud Computing (15 Hrs)

Introduction to Cloud Computing, Architecture of Cloud Computing, Cloud Computing and its types, Cloud Computing service models, Cloud computing examples in day to day life google keep, google calendar and google sheet, advantages and disadvantages of Cloud computing, concept of virtualisation, types of virtualisation, usage of Oracle VM virtual box for creating virtual machines.

7. Big Data Analytics (15 Hrs)

Introduction to Big data Analytics, History and growth of Big Data Analytics, Importance of Big Data Analytics, How does Big Data Analytics work?, Key tools and technologies, Big Data analytics uses and benefits, Challenges faced by Big data Analytics.

8. Artificial Intelligence (AI) and Machine Learning (ML), Augmented Reality / Virtual Reality and Robotics Process Automation (28 Hrs)

AI Introduction: What is AI, History of AI, Types of AI, and Applications of AI, Introduction to Machine Learning, Types of Machine Learning: Supervised Learning, Unsupervised Learning, Reinforcement Learning, Python for Machine Learning, Introduction to Deep Learning and Neural Networks, Machine Learning Vs Deep Learning. Advantages and Disadvantages of Artificial Intelligence, Examples of Applications of AI

Augmented and Virtual Reality (AVR) – Evolution, application areas, Hardware-software, Basic concepts in Transformation - zooming, panning, clipping, rotation and Rendering

Robotics Process Automation - Introduction to RPA technology and how it works, Features and Application of RPA, Advantages and Disadvantage, Hardware and Software requirement, Tools of RPA.

M5: MULTILINGUAL DTP

Objective of the course:

This module will hone the skillset of the Urdu medium students in both the language of Urdu and Hindi and bestow them an opportunity so that they can opt for jobs relating to Graphic designer in the market. By completing this module a student may also start his / her own venture also and become an entrepreneur

Pre-Requisites:

It is expected that the student enrolling in this module may have basic knowledge of Computers.

Duration:

Theory: 60 hrs + Practical: 90 hrs**.**

Syllabus outline

S.no.	Syllabus Outline	Theory	Tutorials	Practical	Total
1	**Introduction to Multimedia & its Application**	5	2	3	10
2	**Urdu Software (InPage) and Urdu, Hindi DTP**	8	4	28	40
3	**Corel Draw**	10	5	35	50
4	**Photoshop and Flash**	10	5	35	50
	Total	**33**	**16**	**101**	**150**

Detailed Syllabus

1. Introduction to Multimedia & its Application (10 Hrs)

Multimedia- What is Multimedia, Text, Graphics, Animation, Audio, Images, Video; Multimedia Application in Education, Entertainment, Marketing. Names of common multimedia file formats, Introduction to MS-Publisher**.**

2. Urdu Software (InPage) and Urdu, Hindi DTP (40 Hrs)

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.

3. CorelDraw (50 Hrs)

Introduction to CorelDraw, Uses of CorelDraw, Fundamental tools, Creating Artistic text, Working with shapes, Controlling the CorelDraw 9 Environment, Setting up Page Layout, Defining Outlines, Mixing Up Fills, Drawing and Editing FreeHand Curves, Bezier Curves, Working with Shapes and Curves, Special effects & Bitmaps, Working with Bitmaps Images, Lenses and PowerClips, Blends and Contours, Working with Perspective, Designing with Paragraph Text, Managing Layers and Pages, Importing and Exporting Objects, Printing, From CorelDraw to the World Wide Web, Driving in to PhotoPaint, Painting text, Painting Bitmap, Working with objects, Working with masks.

4. Photoshop and Flash (50 Hrs)

Introduction to Photoshop, Uses, Fundamental tools, Image Manipulation, Designing Images for web pages, Using Image ready, Scanner & Printer, File, Edit, Image, Layer, Elect, Filter, View, Window, Advance Tools::Healing , smudge, blur, sharpen,dodge, clone tool ,red eye correction tool and Blending modes

Flash: Creating a Flash Document, Reviewing the Interface, Using the Primitive Tools, Creating Key frames, Tweening

Introduction to Illustrator and Dreamweaver.

M6: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING USING PYTHON

Objective of the course: The aim of artificial intelligence (AI) is to make Computer systems that are capable enough to solve complicated problems like humans do and Machine Learning (ML) lends a helping hand to AI in achieving the said task by letting machines learn from data. Student who will complete this module will have an understating of the Conceptual programming aspects related to AI,ML and Data Science. Further with elaborate coverage of the Python language the student will be able to enhance his market value as a Programmer or a Computer instructor.

Pre-Requisites:

It is expected that the student enrolling in this module may have basic knowledge of Computers.

Duration:

Theory: 60 hrs + Practical: 90 hrs.

Syllabus outline

S.no.	Syllabus Outline	Theory	Tutorials	Practical	Total
1	**Introduction to Programming**	2	--	--	2
2	**Algorithms and Flowcharts**	7	5	--	12
3	**Programming with Python**	10	2	16	28
4	**String Handling and Sequence Data types**	8	3	10	21
5	**Functions**	8	3	10	21
6	**File Processing**	6	2	10	18
7	**Machine Learning and AI**	7	3	5	15
8	**Data Science and Analytics Concepts**	4	2	5	11
9	**Introduction to NumPy**	4	2	5	11
10	**Data Analysis Tool: Pandas**	4	2	5	11
	Total	**60**	**24**	**66**	**150**

Detailed Syllabus

1. Introduction to Programming (2 Hrs.)

The basic Model of computation, algorithms, flowcharts, Programming Languages, compilation, testing & debugging and documentation.

2. Algorithms and Flowcharts (12 Hrs.)

Flow Chart Symbols, Basic algorithms/flowcharts for sequential processing, decision-based processing and iterative processing. Examples like Exchanging values of two variables, summation of a set of numbers, Decimal Base to Binary Base conversion, Reverse digits of an integer, GCD (Greatest Common Divisor) of two numbers, Test whether a number is prime, factorial computation, Fibonacci sequence, Reverse order of elements of an array, Find largest number in an array, etc

Programming with Python (28 Hrs.)

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)

Python constructs: 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.

3. String Handling and Sequence Data types (21 Hrs.)

String Handling: Strings (Slicing, Indexing, Concatenation, other operations on Strings), Accepting input from Console, printing statements, Simple 'Python' programs.

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.

4. Functions (21 Hrs.)

Top-down approach of problem solving, Modular programming and functions, Function parameters, Local variables, the Return statement, Default argument values, keyword arguments, VarArgs parameters.

Library function: e.g. input(), eval(),print()

String Functions: e.g. count(), find(), rfind(), capitalize(), title(), lower(), upper(), swapcase(), islower(), isupper(), istitle(), replace(), strip()

Numeric Functions: e.g. eval(), max(), min(), pow(),Date & Time Functions, Recursion.

Packages and Modules: Scope of objects and Names, LEGB Rule Module Basics, Module Files as namespaces, Import Model, Reloading Modules.

5. File Processing (18 Hrs.)

Concept of Files, File opening in various modes and closing of a file, reading from a file, Writing onto a file File functions - open(), close(), read(), readline(), readlines(),write(), writelines(),tell(),seek(), Command Line arguments

6. Machine Learning and AI (15 Hrs.)

Types of Machine Learning Algorithms (supervised, unsupervised), Feature engineering, preparing Training data, test data, validation data, Introduction to different Machine Learning Algorithms, Training the Machine learning model and predicting the results, Applications of Machine Learning. Introduction to Artificial Intelligence, Common Applications of AI, Advantages and Disadvantages of AI, Common examples of AI using python

7. Data Science and Analytics Concepts (11 Hrs.)

What is Data Science and Analytics? The Data Science Process, Framing the problem, Collecting, Processing, Cleaning and Munging Data, Exploratory Data Analysis, Visualizing results

8. Introduction to NumPy (11 Hrs.)

Array Processing Package, Array types, Array slicing, Computation on NumPy Arrays – Universal functions, Aggregations: Min, Max, etc., N-Dimensional arrays, Broadcasting, Fancy indexing, sorting arrays

9. Data Analysis Tool: Pandas (11 Hrs.)

Introduction to the Data Analysis Library Pandas, Pandas objects – Series and Data frames, Data indexing and selection, Nan objects, Manipulating Data Frames, Grouping, filtering, Slicing, Sorting, Ufunc

3.2 CCC: Detailed Syllabus and Learning Outcome:

S.No.	ChapterName	CourseOutline	Duration(Hours)		LearningOutcomes
			Theory	Lab	
1	**Chapter-1IntroductiontoComputer**	1.0 Introduction 1.1 Objectives 1.2 ComputerandLatestITgadgets 1.2.1 EvolutionofComputers&itsapplications 1.2.2 ITgadgetsandtheirapplications. 1.3 Basics ofHardwareandSoftware 1.3.1 Hardware 1.3.1.1 CentralProcessingUnit 1.3.1.2 Inputdevices 1.3.1.3 Outputdevices 1.3.1.4 ComputerMemory&storage 1.3.2 Software 1.3.2.1 ApplicationSoftware 1.3.2.2 SystemsSoftware 1.3.2.3 UtilitySoftware 1.3.2.4 OpensourceandProprietarySoftware 1.3.2.5 MobileApps 1.4 Summary 1.5 ModelQuestionsandAnswers	3	3	Aftercompletionofthischapter,thecandidatewillbeableto • Identify computers,ITgadgetsandexplain their evolution and applications. • Getfamiliarwithvarious input, output and hardwarecomponentsofacomputer along with storagedevices. • Getfamiliarwithvarioustypesofsoftwares,utilities usedforcomputerandmobileapps.

2	**Chapter-2IntroductiontoOperatingSystem**	2.0 Introduction 2.1 Objectives 2.2 OperatingSystem 2.2.1 BasicsofOperatingsystem 2.2.2 OperatingSystemsforDesktopandLaptop 2.2.3 Operating Systems forMobilePhone andTablets 2.3 UserInterfaceforDesktopandLaptop 2.3.1 TaskBar 2.3.2 Icons&shortcuts 2.3.3 RunninganApplication 2.4 OperatingSystemSimpleSetting 2.4.1 UsingMouseandChangingitsProperties 2.4.2 ChangingSystemDateandTime 2.4.3 ChangingDisplayProperties 2.4.4 ToAddorRemoveProgramandFeatures 2.4.5 Adding,Removing&SharingPrinters 2.5 FileandFolderManagement 2.6 TypesoffileExtensions 2.7 Summary 2.8 ModelQuestionsandAnswers	3	4	Afterlearningthischapter, candidate willbe • WellacquaintedwithOperatingSystemanditsapplicationsforbothdesktopandmobiledevices. • abletoidentifyvariousdesktopscreen componentsand modify variousproperties,date, timeetc. • abletoaddandremove new program andfeatures,managefilesandfolders. • Wellversedwithprintingandknowvarioustypesoffile extensions.
3.	**Chapter-3** **WORDPROCESSING**	3.0 Introduction 3.1 Objective 3.2 WordProcessingBasics 3.2.1 OpeningWordProcessingPackage 3.2.2 TitleBar,MenuBar,Toolbars&Sidebar 3.2.3 CreatingaNewDocument 3.3 OpeningandClosingDocuments 3.3.1 OpeningDocuments 3.3.2 SaveandSaveAs 3.3.3 ClosingDocument 3.3.4 UsingTheHelp 3.3.5 PageSetup 3.3.6 PrintPreview 3.3.7 PrintingofDocuments 3.3.8 PDFfileandSavingaDocumentasPDFfile	4	8	Aftercompletionofthis chapter, candidatewillhave • In depth Knowledge of WordProcessing,theirusage,detailsofwordprocessingscreen. • Opening,savingandprintingadocument includingpdffiles. • Document creation,formattingoftext, paragraph and whole document. • InsertingHeaderandFooteronthedocument • Findingtextonaworddocument and correctingspellings. • Abletoinsertandmanipulatetables, enhance table usingborders andshadingfeatures. • Can prepare copiesofadocumentlabelsetcfor

		3.4 TextCreationandmanipulation 3.4.1 DocumentCreation 3.4.2 EditingText 3.4.3 TextSelection 3.4.4 Cut,CopyandPaste 3.4.5 Font,Color,Styleand Sizeselection 3.4.6 AlignmentofText 3.4.7 Undo&Redo 3.4.8 AutoCorrect,Spelling&Grammar 3.4.9 FindandReplace 3.5 FormattingtheText 3.5.1 ParagraphIndentation 3.5.2 BulletsandNumbering 3.5.3 Changecase 3.5.4 Header&Footer 3.6 TableManipulation 3.6.1 Insert&DrawTable 3.6.2 Changingcellwidthandheight 3.6.3 AlignmentofTextincell 3.6.4 Delete / Insertionof Row, ColumnandMerging&Splitting ofCells 3.6.5 BorderandShading 3.7 MailMerge 3.8 ShortcutKeys 3.9 Summary ModelQuestionsandAnswers			sending various recipientsusingMailMerge.

4.	**Chapter-4 SPREADSHEET**	4.0 Introduction 4.1 Objectives 4.2 ElementsofSpreadSheet 4.2.1 CreatingofSpreadSheet 4.2.2 Concept of Cell Address [Row and Column]andselectinga Cell 4.2.3 EnteringData[text, number,date]inCells 4.2.4 PageSetup 4.2.5 Printingof Sheet 4.2.6 SavingSpreadsheet 4.2.7 OpeningandClosing 4.3 ManipulationofCells&Sheet 4.3.1 Modifying/Editing CellContent 4.3.2 FormattingCell(Font,Alignment,Style) 4.3.3 Cut,Copy, Paste& PasteSpecial 4.3.4 ChangingCellHeight andWidth 4.3.5 InsertingandDeletingRows,Column 4.3.6 AutoFill 4.3.7 Sorting&Filtering 4.3.8 Freezingpanes 4.4 Formulas,FunctionsandCharts 4.4.1 UsingFormulasforNumbers(Addition,Subtraction,Multiplication&Division) 4.4.2 AutoSum 4.4.3 Functions(Sum,Count,MAX,MIN,AVERAGE) 4.4.4 Charts(Bar,Pie,Line) 4.5 Summary 4.6 ModelQuestionsandAnswers	4	8	After completion of this chapter, candidate will have good hands- on practice on • Basic Knowledge of Spreadsheet Processing, their usage, details of Spreadsheet screen. • Opening, saving and printing a Spreadsheet. • Spreadsheet creation, inserting and editing data in cells, sorting and filtering of data. • Inserting and deleting rows/columns. • Applying basic formulas and functions. • Prepare chart to represent the information in a pictorial form.
5.	**Chapter-**	5.0 Introduction 5.1 Objectives 5.2 CreationofPresentation 5.2.1 CreatingaPresent	4	8	After completion of this chapter, candidate will have good hands- on practice on • Basic Knowledge of PowerPoint

	5Present **ation**	ationUsingaTemplate 5.2.2 CreatingaBlankPresentation 5.2.3 Inserting&EditingTextonSlides 5.2.4 Insertinganddeletingslidesin aPresentation 5.2.5 SavingaPresentation 5.3 ManipulatingSlides 5.3.1 InsertingTable 5.3.2 AddingClipArtPictures 5.3.3 InsertingOtherObjects 5.3.4 ResizingandScalinganObject 5.3.5 Creating&usingMasterSlide 5.4 PresentationofSlides 5.4.1 ChoosingaSetUpforPresentation 5.4.2 RunningaSlideShow 5.4.3 TransitionandSlideTimings 5.4.4 AutomatingaSlideShow 5.5 ProvidingAestheticstoSlides&Printing 5.5.1 EnhancingTextPresentation 5.5.2 WorkingwithColorandLineStyle 5.5.3 AddingMovieandSound 5.5.4 AddingHeaders,FootersandNotes 5.5.5 PrintingSlidesandHandouts 5.6 Summary 5.7 ModelQuestionsandAnswers			presentations. • Opening/saving a presentation and printing of slides and handouts. • Manipulate slides to enhance the look of the slides as well as whole • presentation by inserting a picture, objects, multimedia formatting etc. • Running a slide show with various transitions.

6.	**Chapter-6** **INTRODUCTIONTO INTERNETANDWWW**	6.0 Introduction 6.1 Objectives 6.2 BasicofComputerNetworks 6.2.1 LocalAreaNetwork(LAN) 6.2.2 WideAreaNetwork(WAN) 6.2.3 NetworkTopology 6.3 Internet 6.3.1 ConceptofInternet&WWW 6.3.2 ApplicationsofInternet 6.3.3 WebsiteAddressandURL 6.3.4 IntroductiontoIP Address 6.3.5 ISPandRoleofISP 6.3.6 InternetProtocol 6.3.7 Modes of Connecting Internet (Hotspot, Wi-Fi,LANCable,Broadband,USBTethering) 6.3.8 IdentifyingandusesofIP/ MAC/IMEIofvariousdevices 6.4 PopularWebBrowsers(InternetExplorer/Edge,Chrome,Mozilla Firefox, Operaetc.) 6.5 ExploringtheInternet 6.5.1 Surfingtheweb 6.5.2 PopularSearchEngines 6.5.3 SearchingonInternet 6.5.4 DownloadingWebPages 6.5.5 PrintingWebPages 6.6 Summary 6.6.1 ModelQuestionsandAnswers	3	4	Aftercompletionofthis chapter, candidatewillbeableto: • Gatherknowledgeof various types ofnetworks andtopologies. • Get an overview ofInternet, its applicationsandvariousbrowsersavailabletoaccesstheinternet. • Connect to Internetusing various modes of connections/devicesavailable. • Getknowledgeofdeviceidentification onlocalnetworkaswellasonInternetforbothDesktop and MobileDevices. • Can searchInformation on theInternet on varioustopics. • Download and printwebpages.

7.	**Chapter-7** **E-mail,SocialNetworkingande-GovernanceServices**	7.0 Introduction 7.1 Objectives 7.2 StructureofE-mail 7.3 UsingE-mails 7.3.1 OpeningEmailaccount 7.3.2 Mailbox:InboxandOutbox 7.3.3 CreatingandSendinganewE-mail 7.3.4 ReplyingtoanE-mailmessage 7.3.5 ForwardinganE-mailmessage 7.3.6 Searchingemails 7.3.7 Attachingfileswithemail 7.3.8 EmailSignature 7.4 SocialNetworking&e-Commerce 7.4.1 Facebook,Twitter,LinkedIn,Instagram 7.4.2 Instant Messaging (WhatsApp, FacebookMessenger, Telegram) 7.4.3 IntroductiontoBlogs 7.4.4 BasicsofE-commerce 7.4.5 Netiquettes 7.5 Overviewofe-GovernanceServiceslikeRailwayReservation,Passport,eHospital[ORS] 7.6 Accessing e-Governance Services on Mobile Using“UMANGAPP” 7.7 DigitalLocker 7.8 Summary 7.9 ModelQuestionsandAnswers	3	6	Aftercompletionofthis chapter, candidatewillbeableto: • Createanemailaccount,composeanemail,replyanemail and send theemailalongwithattachments. • GetfamiliarwithSocialNetworking,InstantMessagingandBlogs. • Get familiarwith e-GovernanceServices, e-CommerceandMobileApps.
8.	**Chapter-8** **DIGITALFINANCIALTOOLSANDAPPLICATIONS**	8.0 Introduction 8.1 Objectives 8.2 DigitalFinancialTools 8.2.1. Understanding OTP [One Time Password]andQR [Quick Response]Code 8.2.2 UPI[UnifiedPaymen	4	4	Aftercompletionofthis chapter, candidatewillbeableto: • KnowtheDigitalFinancialTools. • GetKnowledgeofInternetBankingModes. • Get familiarwith e-GovernanceServices, e-CommerceandMobileApps. • UsetheDigitalLocker and will

		tInterface] 8.2.3 AEPS[AadhaarEnabledPaymentSystem] 8.2.4 USSD[UnstructuredSupplementaryServiceData] 8.2.5 Card[Credit/Debit] 8.2.6 eWallet 8.2.7 PoS[PointofSale] 8.3 InternetBanking 8.3.1 NationalElectronicFundTransfer(NEFT) 8.3.2 RealTimeGrossSettlement(RTGS) 8.3.3 ImmediatePaymentService(IMPS) 8.4 OnlineBillPayment 8.5 Summary 8.6 ModelQuestionsandAnswers			beabletostoredocuments inDigitalLocker.
9.	**Chapter-9** **Overview ofFuture Skills &CyberSecurity**	9.0 IntroductiontoFutureskills 9.1 Introductionto 9.1.1 InternetofThings(IoT) 9.1.2 BigDataAnalytics 9.1.3 CloudComputing 9.1.4 VirtualReality 9.1.5 ArtificialIntelligence 9.1.6 Social&Mobile 9.1.7 BlockchainTechnology 9.1.8 3DPrinting/AdditiveManufacturing 9.1.9 RoboticsProcessAutomation 9.2 CyberSecurity 9.2.1 NeedofCyberSecurity 9.2.2 SecuringPC 9.2.3 SecuringSmartPhone 9.3 Summary 9.4 ModelQuestionsandAnswers	4	3	Aftercompletionofthis chapter, candidatewillbefamiliarwiththe: • Latest trends andtechnologiesinupcomingfieldsinIECT. • WillbeabletounderstandneedofCyberSecurityand will be able tosecuretheirPCand Mobiledevicesbyusingbasicsecurity features.

PART – D

(EXAMINATION SYSTEM)

4.1 DIPLOMA IN COMPUTER APPLICATION, BUSINESS ACCOUNTING AND MULTILINGUAL DTP (CABA-MDTP)

EXAMINATION SCHEME

1. A test will be conducted at the end of each module. The faculty of the centre will check the answer sheets.
2. The weight-age of theory papers will be 10 marks each. It is necessary to obtain a minimum of 5 marks for each module.
3. A final examination will be conducted in each semester. Semester Examinations of CABA-MDTP Course will consist of Part A (Objective) and Part B (Subjective). The student must pass in both parts. Semester Examination will be conducted in December and June. Semester wise distribution of marks is as follows:-

1st Semester

Examination	Marks	Remarks
Semester Exam	100	
Modules Exam	30	3 Modules *10 Marks Each
Total	**130**	

2nd Semester

Examination	Marks	Remarks
Semester Exam	100	
Modules Exam	30	3 Modules *10 Marks Each
Practical	50	Practical- 30, Viva- 20
Project	40	
Total	**220**	

A Student has to obtain minimum of 40% marks in each semester examination Theory paper (IT Component), Urdu Software Inpage, Practical examination & Urdu Certificate individually for qualifying the examination.

4. A test of Urdu Software Inpage of 25 marks shall also be conducted at the end of the 2nd semester in Paper 2.
5. A test of 20 marks for Urdu certificate shall also be conducted at the end of the course: A student shall not be awarded the Certificate unless he/she clears this test.
6. A final practical examination of 50 marks will be conducted at the end of the course.
7. Project prepared by the students shall be examined by the External Examiner. This covers 40 marks.
8. Examination forms of only those students will be forwarded who hae secured 40 % marks or more in Project and aggregate of modules test.
9. Final Examination consists of objective and subjective type questions. NIELIT, Chandigarh will prepare the question paper for IT component under the guidance of controller of examination. The question papers will be sent to the NCPUL Centre/Examiner in sealed envelopes and shall be opened under the supervision of centre-in-charge and Examiner. Distribution of marks of subjective and objective question papers and their duration is as follows:

1st Semester

Modules	Marks	Total Marks	Time	Total Time	Remarks
M1	35	100	1 hrs	3 hrs	Marks of Subjective and Objective portion will be 60 % and 40 % respectively.
M2	30		1 hrs		
M3	**35**		1 hrs		

2nd Semester

Modules	Marks	Total Marks	Time	Total Time	Remarks
M4	25	100	45 min	2.30 hrs	Marks of Subjective and Objective portion will be 60% and 40% respectively.
M5	25		45 min		
DTP InPage	25		30 min		
Urdu	25		30 min		
M6 Urdu	20	20	30 min	0.30 hrs	

10. All answer sheets and response sheets of theory examination including the answer sheets of Urdu Certificate test are to be put in separate envelopes and sealed in the presence of External Examiner, Centre Incharge, Faculty and forwarded to NIELIT, Chandigarh by the next day positively through courier/registered parcel. All unused question papers & response sheets are also to be returned in a separate envelope. Answer sheets not dispatched after next day of the examination will not be examined. Question papers shall be printed both in Urdu & English (bilingual). Students are allowed to write answers in one language only viz, Urdu or in English.

PRACTICAL

The students have to devote half of the total time allotted to each module of the course for the practical session. Practical assignments have been worked out for each theory module.

PROJECT

The Curriculum has a project as an important component of the course. The Project is carried out by the student under guidance and support of faculty and management of the respective Institute/ Organization. It is felt that such a project provides an opportunity to the student to apply his/her knowledge and skills to real life problems (including oral and written communication skills), and as such the project should be given utmost importance and priority both by the students as well as institution faculty/ management in respect of its identification, planning and implementation.

OBJECTIVE OF THE PROJECT

The aim of the project is to give the students an additional hand –on

experience in solving a real life problem by applying knowledge and skills gained on completion of theory papers in a course. It provides an occasion for students to develop written and communication skills. Projects also helps the students to realize the importance of resource and time management, ownership of task towards deliverables, innovation and efficiency in task management apart from presentation skills. It also provides a good opportunity for students to build, enhance and sustain high levels of professional conduct and performance and evolves a problem solver frame of mind in the students. It is also felt that taking up the project by a student prepares him for a job in industry and elsewhere.

COURSE PROJECT SUBMISSION

The Project should be original, of real life value and not copies from existing material from any other source and a certificate to this effect duly countersigned by the Senior Faculty will be submitted to the respective centres.

The candidates are expected to carry out a project successfully and submit certificate in the prescribed format to NIELIT Chandigarh though the head of the Centre running the course, Performa of the Project Completion Certificate is given below:

PERFORMA OF THE PROJECT COMPLETION CERTIFICATE

This is to certify that the Project work done at _____ by Mr./Ms. _____ (Student Identification No. _____) in partial fulfilment of CABA-MDTP Course Examination has been found satisfactory.

It is further certified that he/she has appeared in all the six modules of the CABA-MDTP examination.

Signature
(By Head of the Institution)
Name:
Address :

AWARD OF DIPLOMA

Each successful student of the Diploma course will be awarded 'Diploma in Computer Applications, Business Accounting and Multilingual DTP'' at the end of academic session jointly by NCPUL and NIELIT Chandigarh and 'Diplomain Urdu Language'' by NCPUL.

Grade	Marks	Division
Grade 'A'	75% and above	Distinction
Grade 'B'	60 % and Above & below 75%	1st Division
Grade'C'	50% and Above & below 60%	2nd Division
Grade 'D'	40 % and Above & below 50%	3rd Division
	Less than 40%	Reappear

Students have to obtain minimum of 40% marks in final Theory examination, Urdu Test and Practical Examination, Aggregate of modules

and Project Work individually for qualifying the examination.

REAPPEAR EXAM

A Student who could not clear/appear in Compulsory Urdu Diploma Examination, Theory/Practical exams can also reappear in exams jointly conducted by NCPUL and NIELIT Chandigarh.

SCHEDULE OF THE MODULE EXAMINATIONS OF CABA-MDTP COURSE

Schedule of Module Examination is as follows:

	Jan Session	**July Session**
1st Module	15th March	15th Sep
2nd Module	30th April	30th Oct
3rd Module	15th June	15th Dec
4th Module	15th Sep	15th March
5th Module	30th Oct	30th April
6th Module	15th Dec	15th June

NOTE: Examination shall be held on the next working day if any of the above days is declared as gazetted holiday.

4.2 SCHEDULE OF THE SEMESTER EXAMINATIONS OF CABA-MDTP COURSE

Schedule of Semester Examination is as follows:

SCHEDULE OF THE SEMESTER EXAMINATIONS

First Semester	**January Session**	**July Session**
Dispatch of Prospectus/Registration Form NCPUL to CABA-MDTP Centres	1st Week of May	1st Week of November
Submission of Registration form by the candidates to the centres	30th May	30th November
Centres to submit Registration forms to NIELIT Chandigarh and Detail of Students with fees to NCPUL	15th June	15th December
Dispatch of examination material by NIELIT, Chandigarh	28th May	28th November
1st Semester (9 AM to 12 PM)	4th Saturday of June	4th Saturday of December
2nd Semester (2 PM to 5 PM)	4th Saturday of December	4th Saturday of June
Practical 's by External Examiners	Friday proceeding 4th Saturday of June	Friday proceeding 4th Saturday of December
External Examiner to Dispatch the Examination material to NIELIT, Chandigarh	Immediately after examination	Immediately after examination
Examination material receipt at NIELIT, Chandigarh	Within a week from exam	Within a week from exam

4.3 SCHEDULE OF EXAMINATION APPLICATION FORMS FOR NIELIT CCC EXAMINATION

Activity	Feb Exam	June Exam	Oct Exam
Commencement of sale of Exam form	Proceeding 1st Oct.	Proceeding 1st Feb	Proceeding 1st June
Last date for receipt of request for Exam forms	Proceeding 31st Dec.	Proceeding 30th April	Proceeding 31st August
Last date for submission of filled in forms without late fee	Proceeding 31st Dec.	Proceeding 30th April	Proceeding 31st August
Last date for submission of filled in forms with late fee	Proceeding 10th Jan.	Proceeding 10th May	Proceeding 10th September
Date of commencement of Exam	4th Saturday of Feb.	4th Saturday of June.	4th Saturday of Oct.