UNIVERSITY OF CALICUT

IT MISSION PROGRAMME

Regulations, Scheme of Evaluation Course, Structure Syllabus for

CERTIFICATE PROGRAMME IN DATA ENTRY

(with effect from 2013 Admission)

REGULATIONS

1. **Duration** of the course shall be 3 months. One theory paper and one practical paper shall be the course requirements.
2. **Selection and Eligibility for Admission:** Candidates who have passed SSLC or equivalent are eligible for admission to this course.
3. **Evaluation** of the theory paper and practical examination will be on the basis of the existing University norms. The Grade range shall be Grade A- 60% and above, Grade B- 50%-59%, Grade C- 40%-49%, below 40% FAILD.

COURSE STRUCTURE AND SCHEME OF EVALUATION

Sl.No	Course Code	Course	Number of Contact Hours	Duration of examination (Hrs)		Marks
				Theory	Practical	External
1	CDE1C01	Fundamentals of Computer System and Data Entry Essentials	120	3		100
2	CDE1C02	Practical 1	120	-	3	100
	Total		240	-		200

Syllabus

CDE1C01 – Fundamentals of Computers and Data Entry Essentials

Unit - 1

Introduction: Characteristics of Computers, History of Computers, Generation of Computers, Classification of Computers, Concept of hardware and software, Types of software, Overview of a computer system, Input / Output units, CPU, ALU, Control unit, Memory unit, Storage devices: Primary & Auxiliary memory, Applications of computers.

Software and its need: Types of software, System software, Application software, Introduction to operating system, Types of an Operating System, Functions of Operating System, Basics of Windows operating system: User interfaces, Taskbar and Display features, Running an Application, File and Directory Management, Print options, Switching applications.

Free and open source software: Introduction to GNU/Linux and basics, Linux distribution, File System Introduction, File System Hierarchies, User interfaces, Running an Application, File and Directory Management in Linux.

Unit - 2

Word processing basics: Opening, saving, closing documents, Text creation and manipulation, Editing and formatting documents, Paragraphs: spacing, indents and tabs, Table manipulation: creating, moving, editing tables, adding/deleting rows and columns, Sorting in tables and paragraphs, Calculations in tables, Page layout options, Border and shading, Margins, Paper size and page orientation, Document review, Printing options.

Additional Tools: Help, Spelling and Grammar Correction, Thesaurus word content and statistics, Page numbering, page breaks, column break, Inserting headers and footnotes, Create and add book marks, Insert formula, Import text and graphics, create hyperlinks, Use of macros, Mail merge.

Unit - 3

Basics of presentation software: Preparation and presentation of slides, Using slide layouts, Using slide masters and working with colour schemes, Formatting slides, Bullet points, Setting tabs and indents, Paragraph spacing, Organizing charts/graphs, Adding objects, Movies and sounds, Speaker notes, Using the drawing tools, Slide show, Taking printouts of presentation, handouts.

Unit - 4

Elements of electronic spread sheet: Opening of spread sheet, addressing of cells, Manipulation of cells, Entering text, Number and date series, Editing worksheet data, Inserting and deleting Rows, Column, Changing cell height and width, Application of auto format to a range, Creation of links to connect to data and files, Creation of hyperlink from cell text, Filters, Formulas and function, Saving workbooks, Printing of spread sheets.

Unit – 5

Concept of Internet: Internet as a knowledge repository, connecting to internet, ISP, Basics of internet connectivity related troubleshooting, www, web browsing software, search engines, Applications of Internet. E-mail, Creation of email accounts, Sending and receiving e-mails, Instant Messaging, Blogs.

Multimedia: Introduction to multimedia, elements of multimedia, Colour models - An overview, primary & secondary colour models, Commonly used file formats - Text, Images, audio, video, animation.

Multilingual word processing: Fonts (True Type Font & Open Type Font) for regional Languages, Multilingual data processing tools, Word processors, Transliteration tolls for regional language.

REFECENCES:

1. Computer Fundamentals, PK Sinha, BPB Publications, 2004
2. Absolute Beginner's Guide to Computer Basics, Michael Miller, Prentice Hall.
3. Microsoft Windows 2000, Diana Rain, Karl Schwartz, DDC Publications, 2000
4. Introduction to Linux Installation and Programming, N. B. Venkateshwarlu (Ed); B S Publishers Hyderabad, 2005.
5. Learn Microsoft Office - Russell A.Stultz - BPB Publication.
6. Fundamentals of Information technology, Alexis Leon, Mathews Leon, Vikas Publishing House Pvt. Ltd, 2009.
7. Internet for Every One by Alexis Leon and Mathews Leon; Vikas Publishing House Pvt.Ltd., Jungpura, New Delhi
8. Internet &World WideWeb - How to program, H.M.Deitel, P.J.Deitel et al., Prentice Hall.

CDE1C02 – Practical 1

List of experiments

Experiments should include but not limited to:

1. Fundamentals of Computers and OS
    a. Practice in installing a computer system by giving connection and loading the system software and application software.

2. Word processing
    a. Creating and formatting a document
    b. Prepare a notice
    c. Draft a letter and perform mail merge

3. Presentation
    a. Prepare a presentation for a given topic – include image, audio and video objects.

4. Spread sheet
    a. Use spread sheet to create a rank list for admission to a course with various options.

5. Internet and Multilingual word processing
    a. Creating an e-mail account
    b. Creating and formatting a multilingual document.

General Pattern of Question Paper

Code: **Reg. No:**
Name :

CERTIFICATE PROGRAMME IN DATA ENTRY

Month &Year of Examination

(with effect from 2013 Admission)

CDE1C01 – Fundamentals of Computers and Data Entry Essentials

Time: 3 Hours **Total Marks: 100**

PART A

(20 Multiple Choice Questions; Answer any 15; Each Question carries 1 marks)

PART B

(15 Fill in the blanks Questions; Answer any 10; Each Question carries 2 marks)

PART C

(15 Short Answer Type Questions; Answer any 10; Each Question carries 3 marks)

PART D

(10 Questions; Answer any 7; Each Question carries 5 marks)

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UNIVERSITY OF CALICUT

IT MISSION PROGRAMME

Regulations, Scheme of Evaluation Course, Structure Syllabus for

CERTIFICATE PROGRAMME IN DOCUMENT PUBLISHING

(with effect from 2013 Admission)

REGULATIONS

1. **Duration** of the course shall be 3 months. One theory paper and one practical paper shall be the course requirements.
2. **Selection and Eligibility for Admission:** Candidates who have passed SSLC or equivalent are eligible for admission to this course.
3. **Evaluation** the theory paper and practical examination will be on the basis of the existing University norms. The Grade range shall be Grade A- 60% and above, Grade B- 50%-59%, Grade C- 40%-49%, below 40% FAILD.

COURSE STRUCTURE AND SCHEME OF EVALUATION

Sl.No	Course Code	Course	Number of Contact Hours	Duration of examination (Hrs)		Marks
				Theory	Practical	External
1	CDP1C01	Document Publishing	120	3		100
2	CDP1C02	Practical 1	120	-	3	100
	Total		240	-		200

Syllabus
CDP1C01 – Document Publishing

Unit - 1

Introduction: Characteristics of Computers, History of Computers, Generation of Computers, Classification of Computers, Concept of hardware and software, Types of software, Overview of a computer system, Input / Output units, CPU, ALU, Control unit, Memory unit, Storage devices: Primary & Auxiliary memory, Applications of computers.

Software and its need: Types of software, System software, Application software, Introduction to operating system, Types of an Operating System, Functions of Operating System, Basics of Windows operating system: User interfaces, Taskbar and Display features, Running an Application, File and Directory Management, Print options, Switching applications.

Free and open source software: Introduction to GNU/Linux and basics, Linux distribution, File System Introduction, File System Hierarchies, User interfaces, Running an Application, File and Directory Management in Linux.

Unit – 2

Introduction to Publishing, Stages in Publishing: Pre Press, Printing, Post Press, Pre Press Activities, Content Creation, Design Principles: Focus, Balance, Directional Flow, Unity, White Space, Borders, Choosing Font Type, Pagination, Colour Separation, Computer to Film , Computer to Plate, Comparison, Printing: Paper Qualities, Opacity, Brightness, Thickness, Finish, Type of Ink, Printing Press, Post Press : Guidelines for Designing Documents.

Unit – 3

Introduction to PageMaker, Basics, Tool Box, Constructing a Publication, Text Formatting and word processing. Paragraph Settings, Composition and Typography. Graphics and Text Objects, Short Cut Keys, Master Pages, Header and Footers, Pagination and Numbering, Printing, Imports, Linking and Exporting, Applying and Trapping Colors ,Working with Columns, Control Palette, Creating PDF and HTML Files, Index and Contents, Creating book works-introduction-building booklets, completing the book.

Unit – 4

Introduction to InDesign, Objects, Text, Graphics, Working with Pages, Layers, Colour and Gradients, Manipulating and Transform Objects, Work with Text, Specifying Character Attributes, Setting Up tab and Tables, Effects for Graphics, Free-Form shapes and Curved Paths, Import Data, Export Data, Working with Columns, Control Palette, Index and Contents, Image editing, colour correction, colour management, poly master, methods of colour proofing.

Unit – 5

Concept of Internet: Internet as a knowledge repository, connecting to internet, ISP, Basics of internet connectivity related troubleshooting, www, web browsing software, search engines, Applications of Internet. E-mail, Creation of email accounts, Sending and receiving e-mails, Instant Messaging, Blogs.

Multimedia: Introduction to multimedia, elements of multimedia, Colour models - An overview, primary & secondary colour models, Commonly used file formats - text, images, audio, video, animation.

Multilingual word processing: Fonts (True Type Font & Open Type Font) for regional Languages, Multilingual data processing tools and Word processors.

REFECENCES:

1. Absolute Beginner's Guide to Computer Basics, Michael Miller, Prentice Hall.
2. Computer Fundamentals, A. Goel, Pearson Education, 2010.
3. Microsoft Windows 2000, Diana Rain, Karl Schwartz, DDC Publications, 2000
4. Introduction to Linux Installation and Programming, N. B. Venkateshwarlu (Ed); B S Publishers Hyderabad, 2005.
5. Adobe PageMaker 7 Classroom in a book, Adobe Press.
6. Adobe Classroom in a Book: InDesign CS2, Adobe Press.
7. Fundamentals of Information Technology, Alexis Leon, Mathews Leon, Vikas Publishing House Pvt. Ltd, 2009.
8. Internet for Every One by Alexis Leon and Mathews Leon; Vikas Publishing House Pvt.Ltd., Jungpura, New Delhi

CDP1C02 – Practical 1

List of experiments

Experiments should include but not limited to:

1. Fundamentals of Computers and OS
    a. Practice in installing a computer system by giving connection and loading the system software and application software.

2. PageMaker
    a) Open PageMaker and create a new magazine layout which includes the following setup options:
        1. page size - magazine narrow , orientation tall
        2. 4 page spread
        3. numbering - Lower Roman
        4. margins 1.25 inches- top, and .75 inches - all other sides.
    b) On the first page of your magazine spread, select the Text tool from the PageMaker toolbox and draw a text box and type text and perform various formatting and other operations. Save your work and close PageMaker.

3. Document Layout and Design - InDesign
    a. How to insert a picture in the existing image background?
    b. Create a 3D text in Corel Draw
    c. Create an advertisement for a Textile company in Corel
    d. Design a business card for a company embed photo in it.
    e. Design a banner for a marriage function

4. Internet and Multilingual word processing
    a. Creating an e-mail account
    b. Creating and formatting a multilingual document.

General Pattern of Question Paper

Code: **Reg. No:**
Name :

CERTIFICATE PROGRAMME IN DOCUMENT PUBLISHING

Month &Year of Examination

(with effect from 2013 Admission)

CDP1C01 – Document Publishing

Time: 3 Hours **Total Marks: 100**

PART A

(20 Multiple Choice Questions; Answer any 15; Each Question carries 1 marks)

PART B

(15 Fill in the blanks Questions; Answer any 10; Each Question carries 2 marks)

PART C

(15 Short Answer Type Questions; Answer any 10; Each Question carries 3 marks)

PART D

(10 Questions; Answer any 7; Each Question carries 5 marks)

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UNIVERSITY OF CALICUT

IT MISSION PROGRAMME

Regulations, Scheme of Evaluation Course, Structure Syllabus for

CERTIFICATE PROGRAMME IN COMPUTER HARDWARE AND NETWORKING

(with effect from 2013 Admission)

REGULATIONS

1. **Duration** of the course shall be 3 months. One theory paper and one practical paper shall be the course requirements.
2. **Selection and Eligibility for Admission:** Candidates who have passed SSLC or equivalent are eligible for admission to this course.
3. **Evaluation** of the theory paper and practical examination will be on the basis of the existing University norms. The Grade range shall be Grade A- 60% and above, Grade B- 50%-59%, Grade C- 40%-49%, below 40% FAILD.

COURSE STRUCTURE AND SCHEME OF EVALUATION

Sl.No	Course Code	Course	Number of Contact Hours	Duration of examination (Hrs)		Marks
				Theory	Practical	External
1	CHN1C01	Computer Hardware and Networking	120	3		100
2	CHN1C02	Practical 1	120	-	3	100
	Total		240	-		200

Syllabus

CHN1C01 – Computer Hardware and Networking

Unit – 1

Basic Electronics: Atomic Structures, Electronic Components, Semi-Conductors, Measuring Instruments, Types of computers, Elements of computer system, Block diagram of a computer, Mother Board and its all components, CPU, Input-Output Devices, Primary and Secondary Memory, Magnetic disks, Optical disk, Power Supply, device controllers, serial port, parallel port, system bus, Computer Assembling, Trouble Shooting and Maintenance.

Introduction to Laptops, Portable System background, System Features, Processors, Mother Boards, Memory, Power, Expansion Bus, Hard Disk & Removable Storage Devices, Laptop Components, Laptop Maintenance & Assembling

Unit – 2

Software and its need, System software and Application software, Operating system, Installation, Trouble Shooting, Basics of Windows operating system, Booting sequence, User interfaces, using desktop icons, Running an Application, File and Directory Management, Using elementary jobcommands: creating, saving, modifying, renaming, finding and deleting a file, Run and Manage multiple applications.

Introduction of free and open source software, Linux and basics, Linux distribution, File System Introduction, File System Hierarchies, User interfaces, Setting the Desktop, Running an Application, File and Directory Management in Linux, Commands for files & directories: cd, ls, cp, md, rm, mkdir, rmdir, more, less, Creating and viewing files using cat, File comparisons, Disk related commands: checking disk free spaces.

Unit – 3

Introduction to networking: Advantages of Networking, Transmission media, Wired and unwired media, Cables (CAT6), Mode of transmission, Serial, Parallel, Synchronous, Asynchronous, Analog, Digital, Type of Communication: Simplex, Half Duplex, Full Duplex, Flow Control, Multiplexing, Switching - Circuit switching, Packet Switching and Message Switching, Network devices, Hubs, Bridges, Switches, Routers, Network Topologies: Bus, Star, Ring, Mesh, LAN, WAN, MAN, Ethernet Technologies, Network Models, Layered Architectures, TCP/IP model, OSI model, Introduction to Internet, Services provided by internet, WWW, Web servers and web browsers, web hosting and web pages, IP address and Domain Name System (DNS), URL, Client-server model, HTTP, FTP, Email(POP,IMAP,SMTP), Wireless Networks.

Unit – 4

Windows and Linux Networking essentials: TCP/IP Protocol stack, Logical Addressing and Physical Addressing, IPV4 and IPV6, Subnetting, Network Interface Card, Networking and Internetworking Devices(Repeater, Bridges, Router, Gateway), Routing, Static and Dynamic Rooting Methods, Windows Network Diagnostic Commands(ipconfig, netstat, tracert, ping, pathping), Installing or Verifying Windows Networking Components, Installing a New Adapter, Installing TCP/IP, Installing the Client for Microsoft Networks, Windows network locations(Home, Work, Public, Domain), Installation of a network printer.

Understanding LILO, KDE and GNOME, System requirement and Configuration for a Linux Server, Disk Partition Under Linux Using Fdisk and Disk Drive Under Linux, Installation of Linux as Server / Workstation and its Configuration, Dual Booting Administration, Various Shells of LINUX,LINUX Socket Programming, Common Linux Commands Used, Configuration of Networking with NIC, Administration of User Accounts, X Windows Configuration and Utilities, Using TCP/IP Under Linux and configuring it with Windows.

Unit – 5

Wireless Networks and Network Security : A simplified wireless reference model, Wireless Networking Technologies(CDMA,TDMA, CDPD, GSM),GPRS, Wireless LAN, Wireless LAN Security Fundamentals, Infrared and Radio transmission, Adhoc-networks, IEEE802.11 Standards (IEEE802.11a/b/g/n), HYPERLAN, Bluetooth, Wi-Fi Networking Design and Deployment, Wi-Fi Devices, Wi-Fi Network Trouble Shooting, Wi-Max, Wireless Application Protocol(WAP).

Network Security-Data Encryption and authentication, Adware, Spyware, Malware, Hackers, Trojan Horses, Viruses and Worms, Antivirus Software, Intrusion Detection, Email Security, Spam, Denial of Service attacks, Spoofing, Firewall settings.

REFECENCES:

1. Absolute Beginner's Guide to Computer Basics, Michael Miller, Prentice Hall.
2. Computer Fundamentals, A. Goel, Pearson Education, 2010.
3. Digital fundamentals, Thomas L Floyd, Prentice Hall, 2008
4. Troubleshooting, Maintaining & Repairing PCs, S.Bigelow, Tata McGraw Hill, 2001
5. Introduction to Networking, Richard Mc Mohan, Tata McGraw Hill
6. Data Communication & Networking, A.S.Godbole, Tata McGraw Hill
7. Networking Cabling Handbook, Chris Clerk, Tata McGraw Hill
8. Internet for Every One by Alexis Leon and Mathews Leon; Vikas Publishing House Pvt.Ltd., Jungpura, New Delhi

CHN1C02 – Practical 1

List of experiments

Experiments should include **but not limited to**:

1. Fundamentals of Computers and OS

   a. Practice in installing a computer system by giving connection and loading the system software and application software.

2. Execute the Linux commands for performing the following.

   (a) To create a directory.
   (b) To compare two files and show the differences.
   (c) To pipe the output of “who” command to the “sort” command.
   (d) To change the ownership of a file.
   (e) To save the output in a file and display the same on the VDU

3. Do all steps to share and access the printer and file/folders in the network environments.

4. Perform all the steps to check MAC and IP addresses of your machine and also how to change them.

5. Familiarise the Internet wiring of your Institute and sketch it showing connectors, UTP cable, Hub, Computers, various segments etc.

6. Connect and understand different network devices used in LAN- Hubs, Switches, Routers, Bridges, Repeaters, Gateways, Modems.

6. Execute the following LINUX commands and write down the result and use of each command:

   (a) cp (b) cat (c) who am I (d) more

7. Execute the following Windows Network Diagnostic Commands

   (a) ipconfig, (b) netstat (c) tracert (d) ping (e)pathping

General Pattern of Question Paper

Code: **Reg. No:**
Name :

CERTIFICATE PROGRAMME COMPUTER HARDWARE AND NETWORKING

Month &Year of Examination

(with effect from 2013 Admission)

CHN1C01 – Computer Hardware and Networking

Time: 3 Hours **Total Marks: 100**

PART A

(20 Multiple Choice Questions; Answer any 15; Each Question carries 1 marks)

PART B

(15 Fill in the blanks Questions; Answer any 10; Each Question carries 2 marks)

PART C

(15 Short Answer Type Questions; Answer any 10; Each Question carries 3 marks)

PART D

(10 Questions; Answer any 7; Each Question carries 5 marks)

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