

DEPARTMENT OF LIFELONG LEARNING

SYLLABUS FOR SESSION 2026-27

SIX-MONTH CERTIFICATE COURSE IN COMPUTER BASIC CONCEPTS



GURU NANAK DEV UNIVERSITY, AMRITSAR

The **Certificate Course in Computer Basic Concepts** is being run under the **Department of Lifelong Learning, Guru Nanak Dev University, Amritsar**. The course spans a duration of six months. The admission to this course is held twice a year and Examination will be held at the end of course after six months (**June and December**). After successful completion of the course and passing the final examination, a candidate shall be awarded a **Certificate Course in Computer Basic Concepts**.

Note:

- Copyrights are reserved.
- Nobody is allowed to print it in any form.
- Defaulters will be prosecuted.

PROGRAMME OBJECTIVES

The main objectives of this course are to:

- Provide basic knowledge of a computer system.
- Identify and use various Input/Output devices (keyboards, mouse, printers, etc.) and Data storage (Primary vs. Secondary memory).
- Provide understanding the basic functions of an Operating System including the process of booting.
- Study network types, including topologies, and transmission modes.
- Master skills like creating professional documents using MS Word, organize data using MS-Excel Formulas and designing presentation using MS power point.
- Provide practical knowledge of HTML and DHTML to build web pages and styling them with CSS.

PROGRAMME OUTCOMES

Upon successful completion of this six-month regular course, students will be equipped with the technical skills necessary to pursue a variety of professional pathways in the digital industry:

- Data Entry Operator/Computer Operator
- Office Assistant
- Customer Support Executive
- Back Office Executive
- Web Designer
- Junior Front-End Developer
- Corporate Presentation Designer
- Receptionist/Clerk

ORDINANCES

1) Duration of Course: -

- a) Duration of the Course shall be One Year. Examination will be held once at the end of course after One Year as per GNDU schedule.

2) Eligibility: -

- a) Only for Girls.
b) The candidate who has passed 12th Class examination with minimum 35% marks.

3) Mode of Admission:

- a. The admission will be made by a committee constituted by the Worthy Vice-Chancellor strictly on the basis of the merit of the candidates in 12th class.
b. If any of the admitted student remains absent consecutively for 15 working days without prior information and permission of heading authority from the commencement of the course, the name of such candidate shall be struck off from the rolls of the department and the next candidate on the waiting list in order of merit of the respective course shall be admitted in his/her place with the permission of the Director of the department.

4) Attendance Instructions:

- a. The students admitted to One Year Diploma/Six Month Certificate Courses, who remain absent consecutively for fifteen working days during the duration of the course without any information to the department their name(s) shall be struck off from rolls of the department with the permission of Dean Academic Affairs.
b. The students admitted in One Year Diploma, if they attain less than 25% of the total attendance in six months their name(s) shall be struck off from rolls of the department with the permission of Dean Academic Affairs.
c. The students admitted in six-month certificate courses, if they attain less than 25% of total attendance in three months, the name(s) of such students shall be struck off from rolls of the department with the permission of Dean Academic Affairs.
d. Attended not less than 75% of the full course of lectures delivered and practical arranged for the class.
e. The Director of the department shall have the power to condone shortage of lectures in each paper up to 15% of total taken separately.

5) Fees:

According to the schedule, every candidate shall pay such fees to the university, as per university rules.

6) General Instructions: -

- a. He/ She bears good moral character.
b. The examination shall be held in accordance with the syllabus prescribed by the Department from time to time.
c. The examination shall consist of Practical and Exhibit Display.
d. The Practical paper shall be set by examiner on the spot.

Six Months Certificate Course in Computer Basic Concepts (Session:2026-27)
Department of Lifelong Learning, Guru Nanak Dev University, Amritsar

- e. The medium of instruction/examination shall be English/Punjabi/Hindi in general.
- f. The marks of exhibit display shall be based on House Test and performance of the students.
- g. The marks of exhibit display shall be submitted to the Director of the Department fifteen days before the commencement of the examination.
- h. Minimum number of marks required to pass the examination shall be 35% in each Practical/Exhibit Display separately.
- i. If the candidate Absent/Fails in one or more Practical Examination her result shall be declared Fail.
- j. The result shall be declared and published by the Department.
- k. The successful candidates shall be awarded division according to the following criteria: -
 - (i) Those who obtain 60% or more marks – First division.
 - (ii) Those who obtain 50% or more but less than 60% marks – Second Division
 - (iii) Those who obtain 35% or more marks but less than 50% - Third Division
- l. Each successful candidate shall be awarded a Certificate Signed by the Director of the Department showing the division and the Aggregate Marks obtained.
- m. Fee for issuing of duplicate certificate shall be decided from time to time by the approval of the worthy Vice-Chancellor.

**Six Months Certificate Course in Computer Basic Concepts (Session:2026-27)
Department of Lifelong Learning, Guru Nanak Dev University, Amritsar**

CRITERIA FOR ADMISSION

The Committee makes the following recommendations after deliberations: -

1.	Name of the Course	Certificate Course in Computer Basic Concepts			
2.	Duration	Six Months			
3.	Commencement of Course	July & January Every Year			
4.	Eligibility	10+2 pass female Candidates from Punjab School Education Board or its equivalent.			
5.	Venue	Department of Lifelong Learning, Guru Nanak Dev University, Amritsar.			
6.	No. of Seats	40 seats			
7.	Mode of Admission	(i) The admission will be made by a committee duly constituted by the worthy Vice-Chancellor strictly on the basis of the merit of the candidates in 10+2. (ii) If any of the admitted student remains absent consecutively for fifteen days without prior information and permission of the heading authority, his/her name shall be struck off from the rolls of the Department and the next candidate on the waiting list in order of merit of the respective course shall be admitted in his/her place with the permission of the Director of the Department.			
8.	Fee Structure	Rs.13150/-			
	Total Fee (July 2026 – December 2026) (January 2027- June 2027)	Rs.13150/ which includes: - (To be deposited at the time of Admission) Admission Fee = Rs. 2200/- Examination Fee = Rs.1400/- Tuition Fee: Rs. = Rs.9300/- Identity Card Fee = Rs.250/- The admission with late fee of Rs.800/- may be made within a week from the date of interview with the permission of the Director of the Department.			
9.	Late fee at the time of admission	July 2026 to Dec 2026		Jan 2027 to June 2027	Fees
		May 8 th 2026 to July 31 st 2026		Jan 1 st 2027 to Jan 29 th 2027	Nil
		Aug 3 rd 2026 to Aug 11 th 2026		Feb 2 nd 2027 to Feb 11 th 2027	Nil
		Aug. 12 th 2026 to Aug 20 th 2026		Feb 12 th 2027 to Feb 19 th 2027	RS. 3000/-
		Aug. 21 st 2026 to Aug31 st 2026		Feb 23 rd 2027 to Feb 26 th 2027	RS. 4000/-
		Sep. 1 st 2026 to Sep.10 th 2026		Mar 2 nd 2027 to Mar 10 th 2027	RS. 6000/-
		Sep. 11 th 2026 to Sep 18 th 2026		Mar 11 th 2027 to Mar 19 th 2027	RS. 9000/-
		Within 15 Days from the date of closing of admission.			RS.10000/-
10.	Review of Course of Reading	The syllabus committee constituted by the worthy Vice-Chancellor will review the course of reading for the session.			
11.	Conduct of Examination Evaluation & Award of Certificate.	To be decided with the approval of worthy Vice-Chancellor.			

SCHEME OF STUDY AND EXAMINATION

	SCHEME OF STUDY		SCHEME OF EXAMINATION	
Course Code	Name of Paper	Credits/Hrs. per week	Max. Marks	Examination Hrs.
CBC051	Paper-I (Theory) Computer Fundamentals	8 Hrs.	75	3 Hrs.
CBC052	Paper-II (Practical) PC Computing and Web Designing	8 Hrs.	100	4 Hrs.
CBC053	Project	2 Hrs.	50	
CBC054	Seminar/ Presentation	2 Hrs.	25	
	Total		250	

**PAPER- I (THEORY)
CBC-051: COMPUTER FUNDAMENTALS**

Time: 3 Hours

Max. Marks: 75

Instructions for the Paper Setters:

The paper setter is required to set 9 questions in all and the students are required to attempt 05 questions. First question is compulsory and consists of 15 short answer type questions of one mark each which will be from entire syllabus. Section “A”, “B”, ”C”, ”D” consists of 2 questions. Each student is required to attempt 1 question from every section and all questions carry 15 marks each.

Course Objectives:

- To familiarize student with the basics of a computer system.
- To enable student to identify and differentiate between various input/output devices.
- To differentiate between various types of software, translators and storage devices.
- To provide an introduction to computer networks, Topologies and Transmission media.
- To understand the history, evolution and practical applications of the Internet.
- To master the basic structure of HTML documents.

SECTION-A

INTRODUCTION TO COMPUTERS

- Computer as a system, Characteristics of computer, functional units and their inter relation, Generations of Computers.
- Classifications of computer, Applications of computer.
- Components of computers Input-output devices (key boards, mouse, track ball, light pen, cards, printers, plotters, scanners)
- Data Storage Devices and Media: Primary storage (Storage addresses and capacity, types of memory), Secondary storage, Magnetic storage devices and Optical storage devices.

COMPUTER SOFTWARE

- Software and its types
- Fundamentals of Operating System, Booting process
- Evolution of Computer languages (machine level language, assembly language, high level language), Translators (compiler, interpreter, assembler).

SECTION-B

COMPUTER NETWORKS AND INTERNET

- Computer Network, Advantages, Disadvantages, Types of Networks, Transmission mode, Network Topologies.
- Client Server Systems.
- Transmission Media: - Guided and Unguided Transmission Media, Wireless Media
- Data Communication Equipment: - Repeater, Hub, Switch, Bridge, Router, Gateway, Connector, Modem.
- Internet: - Introduction to Internet and its application, Evolution of internet, E-mail Basics and its uses.

SECTION-C

BASICS OF WEB DESIGN

- Introduction to Website and its working, World Wide Web (WWW).
- Careers in Web Designing or Job Roles.
- Types of Websites (Static and Dynamic Websites), Rules and Principles of Web site Designing.
- Difference between Web Designer and Web Developer.
- Web designing using HTML, DHTML with programming techniques.

SECTION-D

HTML

- Introduction to HTML, Basic structure of HTML Document, creating and Saving HTML document.
- HTML tags such as header tags
- Body tag and their attributes, font tags and attributes, paragraph formatting tag.
- List tags (order and unordered list tags) span, hyperlinks, image tag and its attributes, frames, tables, form tags and its attributes etc.

CSS

- Introduction to CSS and understanding CSS syntax.
- Types of CSS, Adding Rules to a Style Sheet, managing style sheets

Course Outcomes:

After completing this paper, the student will be able to:

- Identify and use the basic functional devices of a computer system (keyboard, mouse, monitor).
- Explain the hierarchy of memory, including the differences between primary (RAM/ROM) and Secondary Storages.
- Differentiate between the system software and application software including the functions of translators (compilers and interpreters).
- Understand the evolution and practical applications of the Internet including the use of E-mail.
- Create webpages using various HTML tags and styling them with CSS styling techniques.

Referenced Books:

1. Singh, H. and Sharma, A. “Fundamentals of Information Technology”- Lakhanpal Publishers,2017.
2. Peter, N. Seventh Edition “Introduction to Computers”, Tata McGraw-Hill,2017.
3. Sharma, A. Gupta, A. Bahl, N, Internet Applications, First Edition” Lakhanpal Publishers.

**PAPER – II (PRACTICAL)
CBC-052 PC COMPUTING AND WEB DESIGNING**

Time: 4 Hours

Max. Marks: 100

Instructions for the paper Setters.

The paper will be set on the spot.

Course Objectives:

- To craft, format & edit reports, resumes, research papers, business letters etc. using Word Processing Software.
- To make student proficient in managing spreadsheets and performing Data Analysis using Spreadsheet Software.
- To design engaging presentations with multimedia integration, custom animations using Presentation Software.
- To manage large volumes of information without errors and extract meaningful insights of database through queries using Database Software.
- To master the basic structure of HTML documents and CSS styling technique.

Introduction to Windows :Parts of window screen (Desktop, window, icons), start menu, Taskbar settings, application & document window, anatomy of a window (Title bar, minimize, maximize button, control box, scroll bars, scroll buttons, scroll boxes), Window explorer (expansion, collapsing of directory tree, copying, moving, deleting files, folder, creating folders), About desktop icons (recycle bin, my computer, folder, shortcut creation, setting of screen saver, color settings, wallpaper, changing window appearance.

Exercise

- 1.Change your desktop wallpaper to a picture of your choice.
 - 2.**Set** a screen saver and choose a wait time of 2 minutes.
 - 3.**Open** Windows Explorer and create a new folder named "Practice"
 - 4.**Copy** a file from any location and paste it into the "Practice" folder.
 - 5.**Create** a shortcut to Notepad on your desktop.
 - 6.**Rename** a folder or file on your desktop.
 - 7.**Delete** a file and then restore it from the Recycle Bin.
 - 8.**Open** any window and use the scroll bar to move the content.
- **Word Processor:** Overview, creating, saving, opening, importing, exporting and inserting files, formatting pages, paragraphs and sections, indents and outdents, creating lists and numbering. Headings, styles, fonts and font size Editing, positioning and viewing texts, Finding and replacing text, inserting page breaks, page numbers, book marks, symbols and dates. Using tabs and tables, header, footer, Mail Merge, Spelling and grammar check and printing.

Six Months Certificate Course in Computer Basic Concepts (Session:2026-27)

Department of Lifelong Learning, Guru Nanak Dev University, Amritsar

Create and Save a Document

- Open a word processor
- Type a short paragraph about your favorite hobby
- Save the document as Hobby.docx

Formatting

- Change the font style to Calibri
- Set the font size to 14
- Make the title bold and center-aligned

Working with Paragraphs

- Indent the first line of the paragraph
- Add bullet points or numbering to a list
- Adjust spacing between paragraphs

Insert Features

- Insert today's date at the top
- Insert a page break after the first paragraph
- Insert a table with 3 columns and 4 rows
- Add a header: "Assignment" and a footer: "Page [number]"

Advanced Editing

- Find and replace a word (e.g., replace "fun" with "enjoyable")
- Add a bookmark titled "Start" at the beginning
- Insert a symbol (e.g., ✓) in the text

Mail Merge

- Create a sample letter and use Mail Merge to insert names and addresses from a sample recipient list.

Spell Check and Printing

- Intentionally write a misspelled word and use the spelling & grammar check to correct it
- Preview the document for printing
- Print (or simulate printing) one copy

- **Presentation Software:** Presentation overview, entering information, Presentation creation, opening and saving presentation, inserting audio and video, Custom Animations, Text formatting, creating graphs, creating a presentation, Applying transitions.

Six Months Certificate Course in Computer Basic Concepts (Session:2026-27) Department of Lifelong Learning, Guru Nanak Dev University, Amritsar

Presentation Creation

- Open PowerPoint or Google Slides.
- Create a new presentation titled "My Dream Vacation".
- Save the file in your desired folder.

Slide Design

- Add 5 slides with the following content:
 - Slide 1: Title Slide (with your name and topic)
 - Slide 2: Text about your destination
 - Slide 3: Bullet points on what to pack
 - Slide 4: Image or video of the place
 - Slide 5: Summary and thank you note

Formatting

- Change font styles and sizes on at least two slides.
- Apply bold, italic, or underline to specific text.

Insert Media

- Insert an image on Slide 2.
- Insert an audio clip or background music on Slide 3.
- Insert a video about your destination on Slide 4.

Graphs

- Create a bar or pie chart on a new slide to show travel budget or daily schedule

Transitions and Animations

- Add different transitions between slides.
- Use custom animations to make text appear one line at a time.

Save and Export

- Save your file again.
- Export the presentation as a PDF.

- **Spreadsheet Packages:** Spreadsheet overview, Editing, Formatting, Creating formulas, Graphs.

-Exercise

Basic Spreadsheet Work

- Open Excel or Google Sheets.
- In cells A1 to A5, type the numbers: 10, 20, 30, 40, 50.
- In cell A6, create a formula to find the total using =SUM(A1:A5).
- Save the file as Practice Spreadsheet.xlsx or .ods.

Formatting

- Make cell A6 bold and change its background color.
- Change the font style of the entire column A to Arial.
- Format the numbers in A1–A5 to display as Currency.

Editing

- Change the value in cell A3 to 35.
- Add the word “Total” to cell B6.

Formulas

- In cell C1, type =A1*2. Drag the fill handle down to apply to cells C2 to C5.
- In cell D1, type a formula using =AVERAGE(A1:A5).

Graphs/Charts

- Highlight A1 to A5 and insert a Column Chart.
 - Add a title to the chart: “Sales Data”.
- **HTML:** Introduction to HTML, Structure of HTML Document, HTML Elements, Text Formatting tags, Links, Lists, Image, Forms, working with Tables, Page Design & Layout with Links.

-Exercise

1. Introduction to HTML

Write a basic HTML page that displays your name, your class, and a short paragraph about your hobbies.

2. Structure of HTML Document

Create a complete HTML document structure including `<!DOCTYPE html>`, `<html>`, `<head>`, `<title>`, and `<body>`. Set the title to "My First Web Page" and write "Hello, World!" in the body.

3. HTML Elements

Use different HTML elements like headings (`<h1>` to `<h3>`), paragraph (`<p>`), horizontal line (`<hr>`), and line break (`
`) in a single web page.

4. Text Formatting Tags

Write a short biography using formatting tags like ``, `<i>`, `<u>`, `<sup>`, `<sub>`, `<mark>`, and `<small>`.

5. Links

Create a web page with:

A link to open Google in a new tab.

A link that scrolls to a section within the same page.

6. Lists

Make a web page that includes:

An ordered list of your daily routine.

An unordered list of your favorite fruits.

7. Image

Insert an image of your favorite place using the `` tag. Add alternate text, set the width to 300px, and align it in the center.

8. Create a webpage containing map of INDIA. On clicking a particular state, name of the state & its capital should be displayed on another webpage.

9. Create a table in HTML with 5 rows & 3 columns. Use Colspan & Rowspan attributes of the table, change the background color of the cells.

8. Forms

Create a form with the following fields:

- Name (Text input)
- Email (Email input)
- Gender (Radio buttons)
- Hobbies (Checkboxes)
- Submit button

9. Working with Tables

Design a table to display student data (Name, Roll No, Marks). Use <thead>, <tbody>, and add a border to the table.

10. Page Design & Layout with Links

Create a two-page mini website:

Page 1: Welcome page with a link to Page 2.

Page 2: A profile page with a back link to Page 1.

Use background color, font style, and basic layout using <div> or <center>.

- **CSS:** Introduction to CSS and understanding CSS syntax, Adding Rules of Style Sheet, managing style sheets.

1. Introduction to CSS

- Write a basic HTML page and change the text color of a heading to blue using CSS.
- Create an HTML page with a <div> and:
- Give it a background color using CSS
- Set its width to 300px
- Add padding of 10px

2. Write a CSS rule to make all paragraphs (<p>) have:

- Green text
- Font size 15px

3. Create a webpage in HTML & change Font, Text, Position, Background & Border properties using Internal CSS.

4. Create a webpage using External CSS method.

5. Create a login form of a website. Style the form using CSS.

6. Design a registration form using various types of form controls (label, textbox, dropdown list, radio button, checkbox, button). Use CSS to style it.

Course Outcomes:

After completing this paper, students will be able to:

- Create, edit, and format professional documents such as resume, business letters, styles and mail merge.
- Organize data in spreadsheets, perform calculations using formulas and summarize large datasets using charts.
- Design visually pleasing Presentations with multimedia (images, audio, video), transitions, animations and transitions.
- Create and manage the relational databases.
- Design Professional and wide variety of websites.

**CBC053
PROJECT**

Max. Marks 50

- At the end of the course students have to submit a real-life based project, using HTML & CSS. The project must be a hands-on application; purely theoretical topics are not permitted.
- Students can work individually or in a group (maximum of two students) under the guidance of supervisor.

**CBC054
SEMINAR/PRESENTATION**

Max. Marks 25

Student will share their thoughts, reflections or learning experiences on the topic assigned to them in the form of seminar and presentation from their entire syllabus.

PANEL OF EXAMINERS

The panel of examiners recommended by the syllabus committee for the Final Examination of Six-Month Certificate Course in Computer Basic Concepts at University Campus, Amritsar for the session 2026-27.

1. Sh. Tirath Singh In-charge Centre for IT Solutions.
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