

**NEHRU MEMORIAL COLLEGE (Autonomous)  
(Nationally Accredited with A grade )  
PUTHANAMPATTI**

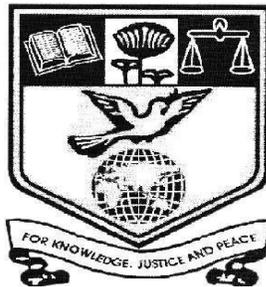
**PG & RESEARCH DEPARTMENT OF MATHEMATICS**

**VALUE ADDED COURSES**

**CERTIFICATE COURSE STRUCTURE & SYLLABI (UG)**

**(CBCS)**

**(For the candidates admitted from 2019-2020 onwards)**



**NEHRU MEMORIAL COLLEGE (AUTONOMOUS), PUTHANMPATTI**

**CERTIFICATE COURSE STRUCTURE**

**CERTIFICATE COURSES OFFERED BY THE DEPARTMENT (OPTIONAL)**

<b>PROGRAMME</b>	<b>NO. OF COURSES</b>	<b>NO. INST. HRS.</b>	<b>MAX. CREDITS</b>	<b>REMARKS</b>
<b>UG</b>	<b>3</b>	<b>20 Hrs / Course</b>	<b>12</b>	<b>OPEN TO ALL UG PROGRAMMES</b>

<b>S.No.</b>	<b>Course Title</b>	<b>Code</b>	<b>Hours/ Semester</b>	<b>Credits</b>	<b>Exam Hours</b>	<b>Total Marks</b>
1	L <sup>A</sup> T <sub>E</sub> X	19CER1T/L	30	4	3	100
2	Fundamentals of Accounting	19CER2	30	4	3	100
3	Fundamentals of Computerized Accounting	19CER3T/L	30	4	3	100
Total				12	-	300

**SYLLABI**  
**CERTIFICATE COURSE ON L<sup>A</sup>T<sub>E</sub>X**

Code	Course Name	Credits	Instructional Hours/ Semester
19CER1T/L	L <sup>A</sup> T <sub>E</sub> X	4	20

**OBJECTIVES:** To learn and practice the typesetting Language L<sup>A</sup>T<sub>E</sub>X

**Unit I:** The basics: What is L<sup>A</sup>T<sub>E</sub>X-Simple typesetting-fonts-Type size-The document: Document class-page style - Page numbering - formatting lengths - Parts of a document - Dividing the document.

**Unit II:** Bibliography: nabib - Bibliography database: The BIB<sub>T</sub>E<sub>X</sub> program - BIB<sub>T</sub>E<sub>X</sub> style file - Creating a bibliography database.

**Unit III:** Table of contents, Index and Glossary: Table of contents - Index - Displayed Text: Borrowed words - Poetry in typesetting - Making list - When order matters - Description and definition.

**Unit IV:** R<sub>p</sub>w<sub>s</sub> and Columns: Keeping tabs - Tables - Typesetting mathematics : The basics - Custom commands- More on mathematics - mathematics miscellany - New operators - The many faces of mathematics - Symbols.

**Unit V:** Typesetting theorems: Theorem in L<sup>A</sup>T<sub>E</sub>X-Designer theorem-The ams theorem package-Housekeeping-Several Kinds of Boxes : L R boxes-Paragraph boxes- Paragraph boxes with specific height-Nested boxes-Rulboxes.

**List of Practical**

- Typesetting
- List
- Enumeration
- Typesetting Mathematics -basics
- Several kinds of Boxes
- Coloring Text
- Inserting Picture
- Bibliography
- Typesetting Mathematics
- Book Environment
- Typesetting Theorems
- Beamer
- Graphs

**References:**

1. Leslie Lamport, 1985. L<sup>A</sup>T<sub>E</sub>X—A Document Preparation System—Users Guide and Reference Manual, Addison- Wesley, Reading.
2. Donald E.Knuth,1989. Typesetting Concrete Mathematics,TUGBoat,10(1):31-36.

**SYLLABI**  
**CERTIFICATE COURSE ON FUNDAMENTALS OF ACCOUNTING**

<b>Code</b>	<b>Course Name</b>	<b>Credits</b>	<b>Instructional Hours / Semester</b>
19CER2	Fundamentals of Accounting	4	20 Hrs.

**Objectives:** To understand the basic accounting methods used in Business

**UNIT – 1**

Definition of Accounting – meaning and objectives – basic terms used in Book Keeping – advantages of Book Keeping – Accounting Concepts and Conventions

**UNIT – 2**

Rules of Double Entry System – Journal – Ledger – Posting journal to ledger – balancing of ledger accounts – distinction between journal and ledger

**UNIT – 3**

Trial Balance – Subsidiary Books – sales book – purchase book – purchase return book – sales return book

**UNIT – 4**

Cash Book – single column, double column book and petty cash book

**UNIT – 5**

Final accounts of sole traders with simple adjustments – closing stock, outstanding expenses and incomes, prepaid expenses and incomes, depreciation

**[Note: Theory 40% Problem 60%]**

**References:**

- Finnerly H.A and Miller H.E, “Principles of Accounting” – Prentice Hall Publication
- PC.Tulasian, “Introduction of Accounting” – Pearson Edition
- M.C.Shukla T.S. Grewal, S.C Gupta “Advanced Accountancy” – S. Chand Company Limited, New Delhi

**SYLLABI**  
**CERTIFICATE COURSE ON COMPUTERIZED ACCOUNTING**

Code	Course Name	Credits	Instructional Hours / Semester
19CER3T/L	Fundamentals of Computerized Accounting	4	20 Hrs.

**Objectives:** To enable the students

- to impart the basic knowledge of computer application in business
- to create practical knowledge in accounting aspects

**UNIT – 1**

Basic of Computerized Accounting – Computerized Vs. Manual Accounting – Architecture and Customization of Tally – Configuration

**UNIT – 2**

Tally introduction – Tally features – Tally versions – Company creation: create company, select company, alter company and delete company – Functional keys – F11 features – F12 configuration

**UNIT – 3**

Accounting Masters – Introduction – Groups – Primary Groups – Sub Groups – Predefined Groups – Create Groups – Create Ledgers – Reporting: Balance Sheet and Profit & Loss account – Trial Balance (view, alter and delete ledgers)

**UNIT – 4**

Inventory Masters – Basic function of Inventory System – Create Inventory Masters: Stock Group Creation, Stock Category Creation – Godown Creation – Units of measurement creation – Stock Item creation – Reporting: Stock Summary and Godown wise Stock Summary

**UNIT – 5**

Voucher and Voucher Classes – Accounting Vouchers – List of Accounting Vouchers – Creation of Voucher type – Simple classes in Accounting Vouchers – Inventory Vouchers – Reporting: Display Day Book

**List of Practical**

- Different types of Voucher Creation
- Preparation of Trial Balance
- Final Accounts without adjustments
- Final Accounts with adjustments
- Preparation of Cost Centre Report
- Different Vouchers creation using Inventory

**References:**

- “Computer Application in Business”, Dr.S.V.Srinivasa Vallabhan – S.Chand & Sons Publishers, New Delhi
- “Foundation of Study Material – Accountant’s Stepping Stone Phase”