



**Advanced IT**  
**Computer Concepts and Applications**

**[Ability Enhancement Course]**

|                    |                   |                             |                     |
|--------------------|-------------------|-----------------------------|---------------------|
| <b>Semester: I</b> | <b>Credits: 3</b> | <b>Subject Code: C12010</b> | <b>Lectures: 48</b> |
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**Course Outcomes:**

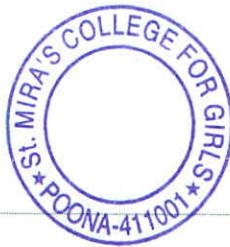
At the end of this course, the learner will be able to:

- List different types of operating system, software, viruses and antivirus
- Illustrate the use of MS WORD, MS ACCESS
- Demonstrate knowledge in setting up a computerized subsidiary books using Tally
- Construct financial statements and maintain data in Tally
- Recognize different types of Networks and Computer Applications in Commerce
- Describe the basic HTML 5 tags and employ the same to construct web page

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| <b>Unit 1: Introduction to Computer and Operating system</b>                                                                                                                                                                                                                                                                                                                        | <b>06</b> |
| <ul style="list-style-type: none"><li>• Introduction to Computer</li><li>• Computer System Hardware</li><li>• Definition of Software</li><li>• Definition of Operating System</li><li>• Working with Windows Operating System</li><li>• Introduction to Free and Open Source Software</li><li>• Definition of Computer Virus, Types of Viruses, Use of Antivirus Software</li></ul> |           |

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| <b>Unit 2: Office Automation Tools, Introduction to Tally</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>16</b> |
| <ul style="list-style-type: none"><li>• Information Technology: Definition, Benefits of I.T. Applications</li><li>• Office Automation Tools<ul style="list-style-type: none"><li>○ MS-WORD</li><li>○ MS-ACCESS</li></ul></li><li>• Data Processing: Definition, Data Processing Cycle, Files and Records</li><li>• Introduction to Tally</li><li>• Accounting with Tally</li><li>• Company Creation</li><li>• Gateway of Tally</li><li>• Accounts Masters</li><li>• Account Vouchers</li><li>• Report Display and Print</li><li>• Cash / Bank Book</li><li>• Balance Sheet</li><li>• End Process</li></ul> |           |

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| Chairperson (HoD)       | Prof. Ms. Ashwini Kulkarni |                  |



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| <ul style="list-style-type: none"> <li>• New Year Accounts</li> <li>• Data Maintenance</li> </ul> |  |
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| <b>Unit 3: Introduction to Computer Network</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>08</b> |
| <ul style="list-style-type: none"> <li>• Introduction to Computer Networking</li> <li>• Computer Network (LAN, WAN, MAN)</li> <li>• Network Components (Hub, Switch, Bridge, Router, Modem)</li> <li>• Network topology, Wireless Network</li> <li>• Overview of WWW</li> <li>• Internet and Internet Application</li> <li>• Overview of World Wide Web</li> <li>• Introduction to Search Engine and Searching Web, Downloading</li> <li>• Introduction to Browsers, Working with E-mail</li> <li>• Introduction to Internet Security</li> <li>• Security, Privacy, Ethical Issues and Cyber Law</li> </ul> |           |

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| <b>Unit 4: Computer Applications in Commerce</b>                                                                                                                                                                                                                                                                                         | <b>06</b> |
| <ul style="list-style-type: none"> <li>• Computer Applications in Business – Need and Scope</li> <li>• E-Commerce <ul style="list-style-type: none"> <li>○ Definition, main Activities</li> <li>○ Benefits, Broad goals of E-Commerce</li> <li>○ Main Components of E-Commerce</li> <li>○ Functions of E-Commerce</li> </ul> </li> </ul> |           |

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| <b>Unit 5: Web Technology-I</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>12</b> |
| <ul style="list-style-type: none"> <li>• Introduction to HTML 5</li> <li>• Basic HTML structure</li> <li>• Physical, Logical HTML, Types of Tags, Common HTML Tags</li> <li>• Document, Stand Alone Tags</li> <li>• Text Formatting tags, Adding images</li> <li>• Tables</li> <li>• List tag (Ordered, Un ordered, Definition list)</li> <li>• Audio, Video tags</li> <li>• Form Tag with basic input elements like (textbox, password, checkbox, radio button, submit button, reset buttons)</li> <li>• Demonstration of Client side image mapping with example</li> </ul> |           |

**#12 contact hours for Assignments, Visits, Research, Field Studies, etc.**

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**Recommended Basic Reading:**

- Bapat Gautam and Dr. Kotkar, D. P. *Computer Concepts and Applications*. Nirali Prakashan: Pune; 2019.
- Nandani, Ashok. *Tally ERP.9*. BPB Publication: New Delhi; 2018.
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- Rajaraman, V. *Fundamentals of Computers*. Prentice Hall: New Delhi; 2007.
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| <b>Semester: II</b> | <b>Credits: 3</b> | <b>Subject Code: C22010</b> | <b>Lectures: 48</b> |
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**Course Outcomes:**

At the end of this course, the learner will be able to:

- Demonstrate simple graphics and the use of CSS in HTML
- Construct webpages and illustrate advanced html tags and input elements
- Design and demonstrate effective presentations using MS Power point
- Apply the formulae, graphs, functions in MS EXCEL
- Demonstrate the application of Taxes on business transactions using Tally
- Explain E-Commerce, M-commerce, EPS system

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| <b>Unit 1: Web Technology-II</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>12</b> |
| <ul style="list-style-type: none"> <li>• Cascading Style Sheet <ul style="list-style-type: none"> <li>○ CSS with HTML</li> <li>○ Concept of CSS</li> <li>○ Types of CSS</li> <li>○ Border, Font, Text-Decoration properties</li> </ul> </li> <li>• Inserting Graphics <ul style="list-style-type: none"> <li>○ Circle, Line, Polygon, Rectangle, Animation</li> </ul> </li> <li>• Form Tag <ul style="list-style-type: none"> <li>○ Advance input elements ( tel, date, email, range, color, number, image)</li> <li>○ Input restrictions ( min, max, pattern, required, autofocus, disabled, read only, required, multiple)</li> </ul> </li> <li>• Anchor Tag <ul style="list-style-type: none"> <li>○ Linking with text</li> <li>○ Linking by an image</li> <li>○ Linking to mail</li> </ul> </li> <li>• Frame Set Tag <ul style="list-style-type: none"> <li>○ Horizontal division</li> <li>○ Vertical division</li> <li>○ Iframe tag</li> </ul> </li> <li>• Demonstration of Semantic tag example</li> </ul> |           |

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| <b>Unit 2: Office Automation Tools</b>                                                 | <b>10</b> |
| <ul style="list-style-type: none"> <li>• MS Power Point</li> <li>• MS Excel</li> </ul> |           |

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| <b>Unit 3: Tally</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>16</b> |
| <ul style="list-style-type: none"> <li>• Basic Invoicing and Inventory <ul style="list-style-type: none"> <li>○ Introduction to Inventory System</li> <li>○ Sales Order, Purchase Order ,Invoicing, Invoice Printing</li> <li>○ Inventory Reports</li> </ul> </li> <li>• GST <ul style="list-style-type: none"> <li>○ GST Activation for the company</li> <li>○ Stock Group, Item set up for GST</li> <li>○ GST Activation for Sales, Purchase ledger</li> <li>○ GST Transaction for Intra State, Inter State</li> <li>○ GST Reports like GSTRN-1,GSTRN-2</li> </ul> </li> <li>• TDS <ul style="list-style-type: none"> <li>○ TDS set up for the company</li> <li>○ TDS nature of payment</li> <li>○ TDS Ledger account, party ledger account expense ledger</li> <li>○ TDS Journal , Payment Voucher</li> <li>○ TDS Challan Printing, TDS reports- FORM26Q</li> </ul> </li> <li>• TCS <ul style="list-style-type: none"> <li>○ TCS Activation</li> <li>○ TCS Ledger Creation</li> <li>○ TCS Applicable stock items</li> <li>○ Sales Invoice Entry, Printing</li> <li>○ TCS deposit with Government, TCS challan printing</li> </ul> </li> </ul> |           |

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| <b>Unit 4: Introduction to E-Commerce Tools, E-Marketing</b>                                                                                                                                                      | <b>05</b> |
| <ul style="list-style-type: none"> <li>• E-Commerce - Process</li> <li>• E-Commerce Activities</li> <li>• E-Marketing</li> <li>• E-Customer Relationship Management</li> <li>• Supply Chain Management</li> </ul> |           |

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| <b>Unit 5: Introduction to Electronic Payment System, M-Commerce</b>                                                                                                                                                                                                   | <b>05</b> |
| <ul style="list-style-type: none"> <li>• Introduction to EPS</li> <li>• M-Commerce: Definition, Advantages and Disadvantages</li> <li>• Applications of M-Commerce</li> <li>• Mobile Payment System</li> <li>• Difference between E-Commerce and M-Commerce</li> </ul> |           |

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- Recent trends in I.T.
- Introduction to Cloud Computing, Green Computing, IOT

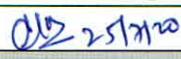
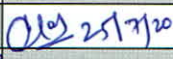
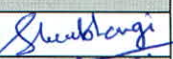
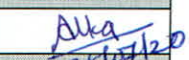
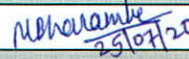
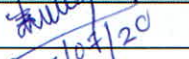
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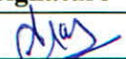
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| Chairperson (HoD)             | Prof. Ms. Ashwini Kulkarni |  |
| Faculty                       | Prof. Ms. Ashwini Kulkarni |  |
| Faculty                       | Ms. Smita Borkar           |  |
| Faculty                       | Ms. Shubhangi Jagtap       |  |
| Faculty                       | Ms. Swati Pulate           |  |
| Faculty                       | Ms. Alka Kalhapure         |  |
| Subject Expert (Outside SPPU) | Prof. Mr. Aniket Nagane    |  |
| Subject Expert (Outside SPPU) | Dr. Manisha Divate         |  |
| VC Nominee                    | Dr. Manisha Bharambe       |  |
| Industry Expert               | Ms. Snehal Biyala          |  |
| Alumni                        | Ms. Mamta Choudharay       |  |

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