

**GOVT. POLYTECHNIC, MANESAR**

**Name of the Faculty** Smt Sharmila (Sr. Lecturer, ECE)  
**Discipline** Electronics & Communication Engineering  
**Year** 1st Year (ECE)

**Lesson Plan Duration :** Approx. 35 weeks (from 30 July, 2018 to 30 April, 2019)

**Work Load per week (in hours):** Practicals-02 Hours per group

| Week | Practical                 |                                                                                                                                                                                                                                   |
|------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | Practical day             | Topic                                                                                                                                                                                                                             |
| 1st  | 1 <sup>st</sup> (Group 1) | Basic Concepts of IT and Its Application: Information Technology concept and scope, applications of IT in office, Air and Railway Ticket reservation, Banks financial transactions, E-Commerce and E-Governance applications etc. |
|      | 2 <sup>nd</sup> (Group 2) | Basic Concepts of IT and Its Application: Information Technology concept and scope, applications of IT in office, Air and Railway Ticket reservation, Banks financial transactions, E-Commerce and E-Governance applications etc. |
| 2nd  | 1 <sup>st</sup> (Group 1) | Ethics of IT, concept of online frauds, threats of IT crimes.                                                                                                                                                                     |
|      | 2 <sup>nd</sup> (Group 2) | Ethics of IT, concept of online frauds, threats of IT crimes.                                                                                                                                                                     |
| 3rd  | 1 <sup>st</sup> (Group 1) | Computer Hardware: Block diagram of a computer, components of computer system, CPU, Memory, Input devices; keyboard, Scanner, mouse etc; Output devices; VDU, LCD, Printers etc.                                                  |
|      | 2 <sup>nd</sup> (Group 2) | Computer Hardware: Block diagram of a computer, components of computer system, CPU, Memory, Input devices; keyboard, Scanner, mouse etc; Output devices; VDU, LCD, Printers etc.                                                  |
| 4th  | 1 <sup>st</sup> (Group 1) | Primary and Secondary Memory: RAM, ROM, magnetic disks – tracks and sectors, optical disk (CD, DVD & Blue Ray Disk), USB/Flash Drive.                                                                                             |
|      | 2 <sup>nd</sup> (Group 2) | Primary and Secondary Memory: RAM, ROM, magnetic disks – tracks and sectors, optical disk (CD, DVD & Blue Ray Disk), USB/Flash Drive.                                                                                             |
| 5th  | 1 <sup>st</sup> (Group 1) | Given a PC, name its various components and peripherals. List their functions.                                                                                                                                                    |
|      | 2 <sup>nd</sup> (Group 2) | Given a PC, name its various components and peripherals. List their functions.                                                                                                                                                    |
| 6th  | 1 <sup>st</sup> (Group 1) | Installing various components of computer system and installing system software and application software.                                                                                                                         |
|      | 2 <sup>nd</sup> (Group 2) | Installing various components of computer system and installing system software and application software.                                                                                                                         |
| 7th  | 1 <sup>st</sup> (Group 1) | Installation of I/O devices, printers and installation of operating system viz. Windows/BOSS/ LINUX.                                                                                                                              |
|      | 2 <sup>nd</sup> (Group 2) | Installation of I/O devices, printers and installation of operating system viz. Windows/BOSS/ LINUX.                                                                                                                              |

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| 8th  | 1st (Group 1)             | Features of Windows as an operating system:                                                                                                                                       |
|      |                           | Start.                                                                                                                                                                            |
|      |                           | Shut down and restore.                                                                                                                                                            |
|      |                           | Creating and operating on the icons.                                                                                                                                              |
|      |                           | Opening, closing and sizing the windows and working with windows interfacing elements (option buttons, checkbox, scroll etc.)                                                     |
|      |                           | Using elementary job commands like – creating, saving, modifying, renaming, finding and deleting a file and folders.                                                              |
|      |                           | Changing settings like, date, time, colour (back ground and fore ground etc.)                                                                                                     |
|      |                           | Using short cuts.                                                                                                                                                                 |
|      |                           | Using on line help.                                                                                                                                                               |
|      | 2nd (Group 2)             | Features of Windows as an operating system:                                                                                                                                       |
|      |                           | Start.                                                                                                                                                                            |
|      |                           | Shut down and restore.                                                                                                                                                            |
|      |                           | Creating and operating on the icons.                                                                                                                                              |
|      |                           | Opening, closing and sizing the windows and working with windows interfacing elements (option buttons, checkbox, scroll etc.)                                                     |
|      |                           | Using elementary job commands like – creating, saving, modifying, renaming, finding and deleting a file and folders.                                                              |
|      |                           | Changing settings like, date, time, colour (back ground and fore ground etc.)                                                                                                     |
|      |                           | Using short cuts.                                                                                                                                                                 |
|      |                           | Using on line help.                                                                                                                                                               |
| 9th  | 1st (Group 1)             | Word Processing (MS Office/Open Office)                                                                                                                                           |
|      |                           | File Management:<br>Opening, creating and saving a document, locating files, copying contents in some different file(s), protecting files, giving password protection for a file. |
|      | 2nd (Group 2)             | Word Processing (MS Office/Open Office)                                                                                                                                           |
|      |                           | File Management:<br>Opening, creating and saving a document, locating files, copying contents in some different file(s), protecting files, giving password protection for a file. |
| 10th | 1 <sup>st</sup> (Group 1) | Page set up:<br>Setting margins, tab setting, ruler, indenting.                                                                                                                   |
|      | 2nd (Group 2)             | Page set up:<br>Setting margins, tab setting, ruler, indenting.                                                                                                                   |
| 11th | 1 <sup>st</sup> (Group 1) | Editing a document:<br>Entering text, cut, copy, paste using tool- bars.                                                                                                          |
|      | 2nd (Group 2)             | Editing a document:                                                                                                                                                               |

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|                  | 2nd (Group 2)             | Entering text, cut, copy, paste using tool- bars.                                                                                                                                                                     |
| 12 <sup>th</sup> | 1 <sup>st</sup> (Group 1) | Formatting a document:                                                                                                                                                                                                |
|                  |                           | Using different fonts, changing font size and colour, changing the appearance through bold/italic/underlined, highlighting a text, changing case, using subscript and superscript, using different underline methods  |
|                  | 2nd (Group 2)             | Formatting a document:                                                                                                                                                                                                |
|                  |                           | Using different fonts, changing font size and colour, changing the appearance through bold/italic/underlined, highlighting a text, changing case, using subscript and superscript, using different underline methods. |
| 13 <sup>th</sup> | 1 <sup>st</sup> (Group 1) | Aligning of text in a document, justification of document, inserting bullets and numbering.                                                                                                                           |
|                  |                           | Formatting paragraph, inserting page breaks and column breaks, line spacing.                                                                                                                                          |
|                  | 2nd (Group 2)             | Aligning of text in a document, justification of document, inserting bullets and numbering.                                                                                                                           |
|                  |                           | Formatting paragraph, inserting page breaks and column breaks, line spacing.                                                                                                                                          |
| 14 <sup>th</sup> | 1 <sup>st</sup> (Group 1) | Use of headers, footers: Inserting footnote, end note, use of comments, autotext.                                                                                                                                     |
|                  |                           | Inserting date, time, special symbols, importing graphic images, drawing tools.                                                                                                                                       |
|                  | 2nd (Group 2)             | Use of headers, footers: Inserting footnote, end note, use of comments, autotext.                                                                                                                                     |
|                  |                           | Inserting date, time, special symbols, importing graphic images, drawing tools.                                                                                                                                       |
| 15 <sup>th</sup> | 1 <sup>st</sup> (Group 1) | Tables and Borders:                                                                                                                                                                                                   |
|                  |                           | Creating a table, formatting cells, use of different border styles, shading in tables, merging of cells, partition of cells, inserting and deleting a row in a table.                                                 |
|                  | 2nd (Group 2)             | Tables and Borders:                                                                                                                                                                                                   |
|                  |                           | Creating a table, formatting cells, use of different border styles, shading in tables, merging of cells, partition of cells, inserting and deleting a row in a table.                                                 |
| 16 <sup>th</sup> | 1 <sup>st</sup> (Group 1) | Print preview, zoom, page set up, printing options.                                                                                                                                                                   |
|                  |                           | Using find, replace options.                                                                                                                                                                                          |
|                  | 2nd (Group 2)             | Print preview, zoom, page set up, printing options.                                                                                                                                                                   |
|                  |                           | Using find, replace options.                                                                                                                                                                                          |
| 17 <sup>th</sup> | 1 <sup>st</sup> (Group 1) | Using Tools like:                                                                                                                                                                                                     |
|                  |                           | Spell checker, help, use of macros, mail merge, thesaurus word content and statistics, printing envelops and lables.                                                                                                  |
|                  |                           | Using shapes and drawing toolbar                                                                                                                                                                                      |
|                  |                           | Working with more than one window .                                                                                                                                                                                   |
|                  |                           | Using Tools like:                                                                                                                                                                                                     |

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|                  | 2 <sup>nd</sup> (Group 2) | Spell checker, help, use of macros, mail merge, thesaurus word content and statistics, printing envelopes and labels.<br>Using shapes and drawing toolbar.<br>Working with more than one window .                                                                                                                                                                                  |
| 18 <sup>th</sup> | 1 <sup>st</sup> (Group 1) | Revision & Assignment.                                                                                                                                                                                                                                                                                                                                                             |
|                  | 2 <sup>nd</sup> (Group 2) | Revision & Assignment.                                                                                                                                                                                                                                                                                                                                                             |
| 19 <sup>th</sup> | 1 <sup>st</sup> (Group 1) | Revision & Practice.                                                                                                                                                                                                                                                                                                                                                               |
|                  | 2 <sup>nd</sup> (Group 2) | Revision & Practice.                                                                                                                                                                                                                                                                                                                                                               |
| 20 <sup>th</sup> | 1 <sup>st</sup> (Group 1) | Software Concepts:<br>System software, Application software, Virtualization software and Utility software, Introduction of Operating System.                                                                                                                                                                                                                                       |
|                  | 2 <sup>nd</sup> (Group 2) | Software Concepts:<br>System software, Application software, Virtualization software and Utility software, Introduction of Operating System.                                                                                                                                                                                                                                       |
| 21 <sup>th</sup> | 1 <sup>st</sup> (Group 1) | Installation of Window / linux, Features of OPEN OFFICE/MS_OFFICE(MS word, Excel, PowerPoint) .                                                                                                                                                                                                                                                                                    |
|                  | 2 <sup>nd</sup> (Group 2) | Installation of Window / linux, Features of OPEN OFFICE/MS_OFFICE(MS word, Excel, PowerPoint) .                                                                                                                                                                                                                                                                                    |
| 22 <sup>th</sup> | 1 <sup>st</sup> (Group 1) | Internet Concepts:<br>Basics of Networking – LAN, WAN, Wi-Fi technologies and sharing of printers and other resources, Concept of IP addresses, DNS, introduction of internet, applications of internet like: e-mail and browsing, concept of search engine and safe searching.                                                                                                    |
|                  | 2 <sup>nd</sup> (Group 2) | Internet Concepts:<br>Basics of Networking – LAN, WAN, Wi-Fi technologies and sharing of printers and other resources, Concept of IP addresses, DNS, introduction of internet, applications of internet like: e-mail and browsing, concept of search engine and safe searching.                                                                                                    |
| 23 <sup>th</sup> | 1 <sup>st</sup> (Group 1) | Various browsers like Internet explorer/Microsoft Edge, Mozilla Firefox, use of cookies and history, WWW (World Wide Web), hyperlinks, introduction to Anti-virus.                                                                                                                                                                                                                 |
|                  | 2 <sup>nd</sup> (Group 2) | Various browsers like Internet explorer/Microsoft Edge, Mozilla Firefox, use of cookies and history, WWW (World Wide Web), hyperlinks, introduction to Anti-virus.                                                                                                                                                                                                                 |
| 24 <sup>th</sup> | 1 <sup>st</sup> (Group 1) | Spread Sheet Processing (MS Office/Open Office)<br>Starting excel, open worksheet, enter, edit, data, formulae to calculate values, format data, save worksheet, switching between different spread sheets<br>Menu commands: Create, format charts, organise, manage data, solving problem by analyzing data. Programming with Excel Work Sheet, getting information while working |
|                  |                           | Spread Sheet Processing (MS Office/Open Office)                                                                                                                                                                                                                                                                                                                                    |

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|      | 2nd (Group 2)             | <p>Starting excel, open worksheet, enter, edit, data, formulae to calculate values, format data, save worksheet, switching between different spread sheets</p> <p>Menu commands: Create, format charts, organise, manage data, solving problem by analyzing data. Programming with Excel Work Sheet, getting information while working</p>                                                                                                                                                                                                |
| 25th | 1 <sup>st</sup> (Group 1) | <p>Work books: Managing workbooks (create, open, close, save), working in work books, selecting the cells, choosing commands, data entry techniques, formula creation and links, controlling calculations.</p> <p>Editing a worksheet, copying, moving cells, pasting, inserting, deletion cells, rows, columns, find and replace text, numbers of cells, formatting worksheet, conditional formatting.</p> <p>Creating a chart:<br/>working with chart types, changing data in chart, formatting a chart, use chart to analyze data.</p> |
|      | 2nd (Group 2)             | <p>Work books: Managing workbooks (create, open, close, save), working in work books, selecting the cells, choosing commands, data entry techniques, formula creation and links, controlling calculations.</p> <p>Editing a worksheet, copying, moving cells, pasting, inserting, deletion cells, rows, columns, find and replace text, numbers of cells, formatting worksheet, conditional formatting.</p> <p>Creating a chart:<br/>working with chart types, changing data in chart, formatting a chart, use chart to analyze data.</p> |
| 26th | 1st (Group 1)             | <p>Retrieve data with query :<br/>Create a pivot table, customizing a pivot table. Statistical analysis of data.</p> <p>Exchange data with other application :<br/>Embedding objects, linking to other applications, import, export document.</p>                                                                                                                                                                                                                                                                                         |
|      | 2nd (Group 2)             | <p>Retrieve data with query :<br/>Create a pivot table, customizing a pivot table. Statistical analysis of data.</p> <p>Exchange data with other application :<br/>Embedding objects, linking to other applications, import, export document.</p>                                                                                                                                                                                                                                                                                         |
| 27th | 1st (Group 1)             | <p>PowerPoint Presentation (MS Office/Open Office)<br/>Introduction to PowerPoint.<br/>How to start PowerPoint.<br/>Working environment: concept of toolbars, slide layout &amp; templates.<br/>Opening a new/existing presentation.<br/>Different views for viewing slides in a presentation : normal, slide sorter.<br/>Addition, deletion and saving of slides.</p>                                                                                                                                                                    |
|      |                           | <p>PowerPoint Presentation (MS Office/Open Office)<br/>Introduction to PowerPoint.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

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|      | 2nd (Group 2) | <p>How to start PowerPoint.</p> <p>Working environment: concept of toolbars, slide layout &amp; templates.</p> <p>Opening a new/existing presentation.</p> <p>Different views for viewing slides in a presentation : normal, slide sorter.</p> <p>Addition, deletion and saving of slides.</p>                                                                                                                  |
| 28th | 1st (Group 1) | <p>Insertion of multimedia elements.</p> <p>Adding text boxes.</p> <p>Adding/importing pictures.</p> <p>Adding movies and sound.</p> <p>Adding tables and charts etc.</p> <p>Adding organizational chart.</p> <p>Editing objects.</p> <p>Working with Clip Art.</p>                                                                                                                                             |
|      | 2nd (Group 2) | <p>Insertion of multimedia elements.</p> <p>Adding text boxes.</p> <p>Adding/importing pictures.</p> <p>Adding movies and sound.</p> <p>Adding tables and charts etc.</p> <p>Adding organizational chart.</p> <p>Editing objects.</p> <p>Working with Clip Art.</p>                                                                                                                                             |
| 29th | 1st (Group 1) | <p>Formatting slides.</p> <p>Using slide master.</p> <p>Text formatting.</p> <p>Changing slide layout.</p> <p>Changing slide colour scheme.</p> <p>Changing background.</p> <p>Applying design template.</p> <p>How to view the slide show?</p> <p>Viewing the presentation using slide navigator.</p> <p>Slide transition.</p> <p>Animation effects, timing, order etc.</p> <p>Use of Pack and Go Options.</p> |
|      | 2nd (Group 2) | <p>Formatting slides.</p> <p>Using slide master.</p> <p>Text formatting.</p> <p>Changing slide layout.</p> <p>Changing slide colour scheme.</p> <p>Changing background.</p> <p>Applying design template.</p> <p>How to view the slide show?</p> <p>Viewing the presentation using slide navigator.</p> <p>Slide transition.</p> <p>Animation effects, timing, order etc.</p> <p>Use of Pack and Go Options.</p> |

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| 30th | 1st (Group 1) | Internet and its Applications.<br>Establishing an internet connection.<br>Browsing and down loading of information from internet.                                                                                                         |
|      | 2nd (Group 2) | Internet and its Applications.<br>Establishing an internet connection.<br>Browsing and down loading of information from internet.                                                                                                         |
| 31th | 1st (Group 1) | Sending and receiving e-mail.<br>Creating a message.<br>Creating an address book.<br>Attaching a file with e-mail message.<br>Receiving a message.<br>Deleting a message.<br>Assigning IP Addresses to computers and use of domain names. |
|      | 2nd (Group 2) | Sending and receiving e-mail.<br>Creating a message.<br>Creating an address book.<br>Attaching a file with e-mail message.<br>Receiving a message.<br>Deleting a message.<br>Assigning IP Addresses to computers and use of domain names. |
| 32th | 1st (Group 1) | Functioning of Antivirus.<br>Installation and updation of an antivirus.<br>How to scan and remove the virus.                                                                                                                              |
|      | 2nd (Group 2) | Functioning of Antivirus.<br>Installation and updation of an antivirus.<br>How to scan and remove the virus.                                                                                                                              |
| 33th | 1st (Group 1) | Revision & Practice.                                                                                                                                                                                                                      |
|      | 2nd (Group 2) | Revision & Practice.                                                                                                                                                                                                                      |
| 34th | 1st (Group 1) | Revision & Practice.                                                                                                                                                                                                                      |
|      | 2nd (Group 2) | Revision & Practice.                                                                                                                                                                                                                      |
| 35th | 1st (Group 1) | Internal Viva.                                                                                                                                                                                                                            |
|      | 2nd (Group 2) | Internal Viva.                                                                                                                                                                                                                            |