

Course Title: <b>Basic Computer Skills Lab</b>	Course Code: <b>15AT12P</b>
Credits (L:T:P) : <b>0:2:4 Credit:3</b>	Core/ Elective: <b>Core</b>
Type of course: <b>Tutorial, Practice</b>	Total Contact Hours: <b>78</b>
CIE- 25 Marks	SEE- 50 marks

**Prerequisites:** Knowledge of English comprehension.

**Course Objectives:**

Learn and understand the Basics of Computers and apply the application tools like word processor, spread sheet and presentation to create documents and presentation in engineering domain.

*On successful completion of the course, the students will be able to attain CO:*

Course Outcome		CL	Experiments linked	Linked PO	Teaching Hrs
CO1	Understand the basic organization of the computer.	R/U/A	1 and 2 of Unit-1	1,2,3,4,8,9,10	03
CO2	Use the different tools and utilities of the operating system.	R/U/A	3 to 7 of Unit-1	1,2,3,4,8,9,10	18
CO3	Demonstrate specified skills of using word processor module.	R/U/A	1 to 6 of word processor part of Unit-2	1,2,3,4,8,9,10	18
CO4	Demonstrate specified skills of using word spread sheet module	R/U/A	1 to 5 of spread sheet part of Unit-2	1,2,3,4,8,9,10	18
CO5	Demonstrate specified skills of using presentation module.	R/U/A	1 to 3 of presentation part of Unit-2	1,2,3,4,8,9,10	09
CO6	Utilize the concepts learned to create a mini project.	U/A	Contents mini project part of Unit2	All ten	12
<b>Total sessions</b>					<b>78</b>

**COURSE PO ATTAINMENT MATRIX**

Course	Programme Outcomes									
	1	2	3	4	5	6	7	8	9	10
<b>Basic Computer skills Lab</b>	3	3	3	3	1	1	1	3	3	3

**Level 3- Highly Addressed, Level 2-Moderately Addressed, Level 1-Low Addressed.**

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

If  $\geq 40\%$  of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3

If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2

If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1

If  $< 5\%$  of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

## **Course Contents:**

### **Tutorials and Practice**

#### **Unit – I**

##### ***Introduction to Computer Hardware and Software***

1. Identify and understand the models of Computers, Identify and understand front panel switches and back panel connections of a Computer system, Identify and understand the physical components of a Computer.
2. Conduct computer system connection and understand the booting process.
3. Study and Practice of Basic DOS Commands.
4. Familiarization of GUI based Operating System environment.
5. Practice creating Icons and Folders, Creating/Opening of file, Editing and saving the document, Copy, Cut and Paste operations, in-built utilities of OS like – Text editors, paint, calculator, etc.
6. Practice browsing of different sites using search engine.
7. Practice Creating E-Mail accounts, Sending, Receiving of E-Mails.

#### **Unit –II**

##### ***Word Processing***

1. Create a Business Letter and Personal Letter.
2. Create a Company Letterhead.
3. Create a Simple Newsletter with minimum three columns. Insert a Clip art in the newsletter.
4. Create a Resume for a Job Application.
5. Create the cover page of a Project Report (use Word Art, insert Picture Image).
6. Prepare the class time table for your class.

##### ***Spreadsheet***

1. Create a worksheet with five columns. Enter ten records and find the sum of all columns using auto sum feature.
2. You have a monthly income of Rs.11000. Your monthly expenditures are Rent- Rs 3500, Food- Rs. 1500, Electricity- Rs.110, Phone- Rs. 160, and Cable TV-Rs. 300. Prepare a worksheet with the Monthly Income, the Monthly Expenditures listed and summed, monthly savings amount (what's left over each month) calculated, and the amount saved per day (assuming 30 days in a month).

3. Create a worksheet containing the pay details(containing Basic pay, DA, HRA ,Other Allowance , Deductions- PF,PT, Insurance, Gross and Net salary) of the employees using formulas.
4. Create a Simple Bar Chart to highlight the sales of a company for three different periods.
5. Create a Pie Chart for a sample data and give legends.

### **Presentation**

1. Using presentation tool, Create a simple Presentation consisting of 4-5 slides about Input and Output Devices.
2. Create a presentation about a book containing Title, Author, Publisher and Contents.
3. Create an automated (with timings & animation) Presentation with five slides about different Models of Computers. Use Presentation tool.

### **Mini-project [CIE- 05 Marks]**

Prepare a mini project using the above concepts of Unit-I and/or Unit-II.

- Repair and Overhauling of PC of laboratory
- Formatting of PC
- Servicing of UPS
- Prepare a report using the learned skills on Unit 1 to Unit II

### **Course Delivery:**

The course will be delivered through tutorials of two hours and four hours of hands on practice per week.

### **References:**

1. Computer Fundamentals Concepts, Systems, Application, D.P.Nagapal, S.Chand Publication, RP-2014, ISBN: 81-219-2388-3
2. <http://www.tutorialsforopenoffice.org/>
3. <http://www.libreoffice.org/get-help/documentation/>
4. [http:// www.kingsoftstore.com/](http://www.kingsoftstore.com/)

### **S/w Tools: Any open source tool or equivalent proprietary tools**

**Course Assessment and Evaluation Scheme:**

Method	What		To whom	When/Where (Frequency in the course)	Max Marks	Evidence collected	Course outcomes
<b>DIRECT ASSESSMENT</b>	CIE (Continuous Internal Evaluation)	IA Tests	Students	Two Tests (Average of two tests)	10	Blue books	1,2,3,4,5,6
				Record Writing (Average marks of each exercise to be computed)	10	Record Book	1,2,3,4,5,6
				Mini Project	05	Report	1,2,3,4,5,6
				<b>TOTAL</b>	25		
	SEE (Semester End Examination)	End Exam		End of the course	50	Answer scripts at BTE	1,2,3,4,5,6
<b>INDIRECT ASSESSMENT</b>	Student Feedback on course		Students	Middle of the course		Feedback forms	1, 2,3 Delivery of course
	End of Course Survey			End of the course		Questionnaires	1,2,3, 4,5,6 Effectiveness of Delivery of instructions & Assessment Methods

\*CIE – Continuous Internal Evaluation

\*SEE – Semester End Examination

**Note:**

1. I.A. test shall be conducted as per SEE scheme of valuation. However obtained marks shall be reduced to 10 marks. Average marks of two tests shall be rounded off to the next higher digit.
2. Rubrics to be devised appropriately by the concerned faculty to assess Mini project/Student activities.

**MODEL OF RUBRICS FOR ASSESSING STUDENT ACTIVITY/MINI PROJECT:**

**Note: The dimensions and scales have to be decided by the teacher based on the type of activity.**

Dimension	Scale					Students Score				
	Unsatisfactory (1 marks)	Developing (2marks)	Satisfactory (3marks)	Good(4 marks)	Exemplary (5marks)	1	2	3	4	5
1. Research and gather information	Does not collect information relate to topic	Collects very limited information ,some relate to topic	Collects basic information, most refer to the topic	Collects more information, most refer to the topic	Collects a great deals of information, all refer to the topic	2				
2.Full fills teams roles and duties	Does not perform any duties assigned to the team role	Performs very little duties	Performs nearly all duties	Performs almost all duties	Performs all duties of assigned team roles	3				
3.Shares work equally	Always relies on others to do the work	Rarely does the assigned work, often needs reminding	Usually does the assigned work, rarely needs reminding	Always does the assigned work, rarely needs reminding.	Always does the assigned work, without needing reminding	4				
4. listen to other team mates	Is always talking, never allows anyone to else to speak	Usually does most of the talking, rarely allows others to speak	Listens, but sometimes talk too much,	Listens and talks a little more than needed.	Listens and talks a fare amount	5				
<b>Grand Average/Total= <math>(2+3+4+5)/4=14/4=3.5=4</math></b>						4				

### Scheme of Evaluation for End Exam

SN	Scheme	Max. Marks
2	Testing skills/ abilities from Unit - I	10
3	Writing steps on any one from Unit -II	10
4	Execution with result	15
5	Presentation of result	05
6	Viva voce	10
<b>Total</b>		<b>50</b>
<b>Note:</b> 1. Candidate shall submit Lab Record for the Examination. 2. Student shall be allowed to execute directly even if he/she unable to write the procedure 3. In case of change in experiment or no write up, marks will not be awarded for writing procedure/steps.		

### Resource requirements for Basic Computer Skills Lab

(For an Intake of 60 Students [3 Batches])

#### Hardware requirement

Sl. No.	Equipment	Quantity
1	PC systems (latest configurations with speakers)	20
2	Laser Printers	03
3	Networking (Structured) with cat 6e / wireless 24 Port switches / Wireless Router I/O Boxes for networking(as required)	03
4	Broad Band Connection	01

#### Software Requirement:

Linux, Libre Office / Open Office / King soft Office / any equivalent software.

**Note: Students: Computers ratio in the Lab should be strictly 1:1 for a batch of twenty Students.**

## **MODEL QUESTION BANK**

**Note:** *One Question from Unit-I and Unit-II*

### **UNIT-I**

1. Identify Physical components of a Computer System.
2. Demonstrate Internal and External DOS Commands and differentiate between them.
3. Create and rename the file using DOS Commands.
4. Create a directory and copy a file inside the directory using DOS Commands.
5. Demonstrate the basic formatting features in Text Editors.
6. Create two file in a folder and place the shortcut of these files on the desktop.
7. Demonstrate how search engine may be used in browsing Internet.
8. Create an email account
9. Create and Send an email with a picture attachment.
10. Demonstrate how documents can be downloaded using Internet.

### **UNIT-II**

1. Using Word Processor Application create a Business Letter.
2. Using Word Processor Application create a Personal Letter.
3. Using Word Processor Application create a letter head for company.
4. Using Word Processor Application create a Simple Newsletter with minimum of three columns. Insert a Clip art in the newsletter.
5. Using Word Processor Application create a Resume for a Job application.
6. Using Word Processor Application create the cover page of a Project Report (use Word Art, insert Picture Image).
7. Prepare the class time table for your class using Word Processor Application.
8. Using Spreadsheet Application, create a worksheet with five columns. Enter ten records and find the sum of all columns using auto sum feature.
9. You have a monthly income of Rs.11000. Your monthly expenditures are Rent- Rs 3500, Food- Rs. 1500, Electricity- Rs.110, Phone- Rs. 160, and Cable TV-Rs. 300. Prepare a worksheet with the Monthly Income, the Monthly Expenditures listed and summed, monthly savings amount (what's left over each month) calculated, and the amount saved per day (assuming 30 days in a month).Use Spreadsheet Application.

10. Using Spreadsheet Application, create a worksheet containing the pay details(containing Basic pay, DA, HRA ,Other Allowance , Deductions- PF,PT, Insurance, Gross and Net salary) of the employees using formulas.
11. Using Spreadsheet Application, create a Simple Bar Chart to highlight the sales of a company for three different periods.
12. Using Spreadsheet Application, create a Pie Chart for a sample data and give legends.
13. Using presentation tool, Create a simple Presentation consisting of 4-5 slides about Input and Output Devices or other content.
14. Create a presentation about a book or other content containing Title, Author, Publisher and Contents.
15. Create an automated (timings & animation) Presentation with five slides about different Models of Computers or other content. Use Presentation tool.