	Course Title: Basic Computer Skills Lab	Course Code: 15ME13P
2 \ Q2	Credits (L:T:P) : <b>0:2:4</b>	Core/ Elective: Core
	Type of course: <b>Tutorial, Practice</b>	Total Contact Hours: 78
<b>o o</b> 40		
CIE- 25 Marks		SEE-50 Marks

Prerequisites: Knowledge of English comprehension.

# COURSE OBJECTIVES

Will learn and understand the Basics of Computers and apply the application tools like word processor, spread sheet and presentation.

# **COURSE OUTCOMES**

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	1and 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 sheets part of Unit- 2	1,2,3,4,8,9,10	18
C05	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
C06	Utilize the concepts learned to create a mini project.	U/A	Contents mini project part of Unit2	All ten	12
		Total ses	ssions		78

Directorate Of Technical Education

#### **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 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. Familiarization of GUI based Operating System environment.
- 4. 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.
- 5. Practice browsing of different sites using search engine.
- 6. Practice Creating E-Mail accounts, E-Mail Group, Sending, and 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 autosum 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]

- 1. 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/

S/W Tools: Any open source tool or equivalent proprietary tools

Directorate Of Technical Education

# **Course Assessment and Evaluation Scheme:**

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

<sup>\*</sup>CIE – Continuous Internal Evaluation

### 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.

<sup>\*</sup>SEE – Semester End Examination

### • MODEL OF RUBRICS /CRITERIA FOR ASSESSING STUDENT ACTIVITY

RUBRICS FOR ACTIVITY( 5 Marks)								
Dimension	Unsatisfactory	Developing	Satisfactory	Good	Exemplary	Student		
	1	2	3	4	5	Score		
Collection of data	Does not collect any information relating to the topic	Collects very limited information; some relate to the topic	Collect much information; but very limited relate to the topic	Collects some basic information; most refer to the topic	Collects a great deal of information; all refer to the topic	Ex: 4		
Fulfil team's roles & duties	Does not perform any duties assigned to the team role	Performs very little duties but unreliable.	Performs very little duties	Performs nearly all duties	Performs all duties of assigned team roles	5		
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	Normally does the assigned work	Always does the assigned work without having to be reminded.	3		
Listen to other Team mates	Is always talking; never allows anyone else to speak	Usually does most of the talking; rarely allows others to speak	Talks good; but never show interest in listening others	Listens, but sometimes talk too much	Listens and speaks a fair amount	2		
	1	Average	/ Total marks	=(4+5+3+2)/4	=14/4=3.5=4			

Note: This is only an example. Appropriate rubrics/criteria may be devised by the concerned faculty (Course Coordinator) for assessing the given activity.

Questions for CIE and SEE will be designed to evaluate the various educational components such as:

Remembering and Understanding : - 20% weightage
 Applying the knowledge acquired from the course : - 70 % weightage
 Analysis : - 1% weightage
 Evaluation : - 1% weightage
 Creating new knowledge : - 8% weightage

### **Scheme of Evaluation for End Exam**

SN	Scheme	Max. Marks				
2	Testing skills/ abilities from Unit - I					
3	One question on Word or Power point05M), one question from spread sheet(10M) from UNIT-II					
4	Execution of Word or Power point	10				
5	5 Execution of spread sheet					
6	6 Viva voce					
	Total					
1. Car 2. Stu wri 3. In 6						

## 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	03
	24 Port switches / Wireless Router	
	I/O Boxes for networking(as required)	
4	Broad Band Connection	01

Software Requirement: Linux, Libre Office / Open Office / Kingsoft Office / any equivalent software.

## **Note:**

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

### **MODEL QUESTION BANK**

#### FOR PRACTICE AND FINAL EAXM

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

### **UNIT-I**

- 1. Identify Physical components of a Computer System.
- 2. Demonstrate the basic formatting features in Text Editors.
- 3. Create two file in a folder and place the shortcut of these files on the desktop.
- 4. Demonstrate how search engine may be used in browsing Internet.
- 5. Create an email account
- 6. Create and Send an email with a picture attachment.
- 7. 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.
- 14. Create a presentation about a book containing Title, Author, Publisher and Contents.
- 15. Create an automated (timings & animation) Presentation with five slides about different Models of Computers. Use Presentation tool.



**Directorate Of Technical Education**