

**Government of Karnataka**  
**Department of Technical Education**  
**Bengaluru**

|   |   |                                |                                |
|---|---|--------------------------------|--------------------------------|
|  | <b>Course Title: Basic Computer Skills Lab</b>  |                                |                                |
|   | Scheme (L:T:P) : <b>0:2:4</b>                   | Total Contact Hours: <b>78</b> | Course Code:<br><b>15CE13P</b> |
|   | Type of Course: <b>Tutorial and Practical's</b> | Credit : <b>03</b>             | Core/ Elective:<br><b>Core</b> |
| CIE- 25 Marks   |   | SEE- 50 Marks                  |                                |

### Pre-requisite

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 Outcome

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

| Course Outcome |  | Experiment linked | CL                    | Linked PO      | Teaching Hrs |
|----------------|--|-------------------|-----------------------|----------------|--------------|
| CO1            | Understand and identify the models, components of a computer along with its connections, operating system concepts along with internet operation | 1-7               | U                     | 1,2,3,4,8,10   | 15           |
| CO2            | Demonstrate skills using word processor  | 8-13              | A                     | 1,2,3,4,8,9,10 | 24           |
| CO3            | Demonstrate skills using spreadsheet presentation  | 14-18             | A                     | 1,2,3,4,8,9,10 | 24           |
| CO4            | Demonstrate skills using presentation  | 19-21             | A                     | 1,2,3,4,8,9,10 | 15           |
|                |  |                   | <b>Total sessions</b> |                | <b>78</b>    |

**Legends:** R = Remember U= Understand; A= Apply and above levels (Bloom's revised taxonomy)

### Course-PO Attainment Matrix

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

**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.

## **LIST OF GRADED EXERCISES**

### **Tutorials and Practice**

#### **Unit – I**

##### ***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, built-in 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***

8. Create a Business Letter and Personal Letter.
9. Create a Company Letter head.
10. Create a Simple Newsletter with minimum three columns. Insert a Clip Art in the Newsletter.
11. Create a Resume for a Job Application.
12. Create the Cover Page of a Project Report (use Word Art, insert Picture Image).
13. Prepare the class time table of your class.

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

14. Create a worksheet with five columns. Enter ten records and find the sum of all columns using auto sum feature.
15. 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).
16. 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.
17. Create a Simple Bar Chart to highlight the sales of a company for three different periods.
18. Create a Pie Chart for a sample data and give legends.

### Presentation

19. Using presentation tool, Create a simple Presentation consisting of 4-5 slides about Input and Output Devices.
20. Create a presentation about a Book containing Title, Author, Publisher and Contents.
21. 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 of a minimum of 5 pages of report, using the above concepts of Unit-I and/or Unit-II

### 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/>

### Software Tools

Any open source tool or equivalent proprietary tools

### Course Delivery

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

### Course Assessment and Evaluation Scheme

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

**Note:** 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.

Questions for CIE and SEE will be designed to evaluate the various educational components (Bloom's taxonomy) such as:

| Sl. No | Bloom's Category | %  |
|--------|------------------|----|
| 1      | Remembrance      | 10 |
| 2      | Understanding    | 20 |
| 3      | Application      | 70 |

### Format for Student Activity Assessment

| DIMENSION                                | Unsatisfactory<br>1                                    | Developing<br>2   | Satisfactory<br>3                                      | Good<br>4   | Exemplary<br>5   | Score              |
|--|--|---|--|---|--|--------------------|
| <b>Collection of data</b>                | Does not collect any information relating to the topic | Collects very limited information; some relate to the topic     | Collects some basic information; refer to the topic    | Collects relevant information; concerned to the topic | Collects a great deal of information; all refer to the topic                             | 3                  |
| <b>Fulfill team's roles &amp; duties</b> | Does not perform any duties assigned to the team role  | Performs very little duties                                     | Performs nearly all duties                             | Performs all duties                                   | Performs all duties of assigned team roles with presentation                             | 4                  |
| <b>Shares work equally</b>               | Always relies on others to do the work                 | Rarely does the assigned work; often needs reminding            | Usually does the assigned work; rarely needs reminding | Does the assigned job without having to be reminded.  | Always does the assigned work without having to be reminded and on given time frame      | 3                  |
| <b>Listen to other Team mates</b>        | Is always talking; never allows anyone else to speak   | Usually does most of the talking; rarely allows others to speak | Listens, but sometimes talk too much                   | Listens and contributes to the relevant topic         | Listens and contributes precisely to the relevant topic and exhibit leadership qualities | 3                  |
| <b>TOTAL</b>                             |  |   |  |   |  | <b>13/4=3.25=4</b> |

*\*All student activities should be done in a group of 4-5 students with a team leader.*

### Scheme of Evaluation for End Exam

| SN   | Scheme                                  | Max. Marks |
|--|---|------------|
| 1  | Testing Skills/ Abilities from Unit - I | 10         |
| 2  | Writing steps on any one from Unit -II  | 10         |
| 3  | Execution                               | 10         |
| 4  | Presentation of Result                  | 10         |
| 5  | Viva voce                               | 10         |
| <b>Total</b>   |   | <b>50</b>  |
| <b>Note:</b>   |   |            |
| <ol style="list-style-type: none"> <li>1. Candidate shall submit Lab Record for the Semester End Examination.</li> <li>2. Student shall be allowed to execute directly even if he / she is unable to write the procedure</li> <li>3. In case of change in experiment or no write up, marks will not be awarded for writing procedure/steps.</li> </ol> |   |            |

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

#### Software Requirement:

Linux, Libre Office/Open Office/Kingsoft Office/ any equivalent software.

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

**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 E-mail account
9. Create and Send an E-mail with a picture attachment.
10. Demonstrate how documents can be downloaded using Internet.

**UNIT-II**

11. Using Word Processor Application create a Business Letter.
12. Using Word Processor Application create a Personal Letter.
13. Using Word Processor Application create a letter head for company.
14. Using Word Processor Application create a Simple Newsletter with minimum of three columns. Insert a Clip art in the newsletter.
15. Using Word Processor Application create a Resume for a Job application.
16. Using Word Processor Application create the cover page of a Project Report (use Word Art, insert Picture Image).
17. Prepare the class time table for your class using Word Processor Application.
18. Using Spreadsheet Application, create a worksheet with five columns. Enter ten records and find the sum of all columns using auto sum feature.
19. 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.

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