# Government of Karnataka Department of Technical Education Bengaluru

|                             | Course Title: <b>B</b>              | asic Computer Skills Lab |                      |
|-----------------------------|-------------------------------------|--------------------------|----------------------|
| BASIC<br>COMPUTER<br>SKALS: | Scheme (L:T:P) : <b>0:2:4</b>       | Total Contact Hours: 78  | Course Code: 15CS11P |
|                             | Type of Course: <b>Tutorial and</b> | Credit :03               | Core/ Elective:      |
|                             | Practical's                         |                          | Core                 |
| CIE- 25 Mar                 | ks                                  |                          | 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<br>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              |
|     |  |                   | Total | sessions       | 78              |

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 |
| Basic Computer Skills<br>Lab | 3                  | 3 | 3 | 3 | - | - | 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.

#### **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<br>whom | When/Where<br>(Frequency<br>in the                             | Max<br>Marks | Evidence<br>collected | Course outcomes   |
|------------------------|---|-------------|------------|--|--------------|-----------------------|---|
| Н                      |   |             |            | Two Tests (average of two tests will be computed)              | 10           | Blue books            | 1,2,3,4   |
| DIRECT ASSESSMENT      | CIE<br>(Continuous<br>Internal<br>Evaluation) IA<br>Tests |             | Students   | Record Writing (Average marks of each exercise to be computed) | 10           | Record Book           | 1,2,3,4   |
| EC                     |   |             | _          | Mini Project   | 05           | Report                | 1,2,3,4   |
|                        |   |             |            | TOTAL  | 25           |                       |   |
|                        | SEE<br>(Semester<br>End<br>Examination)                   | End<br>Exam |            | End of the course  | 50           | Answer scripts at BTE | 1,2,3,4   |
|                        | Student Feedb   | ack on      |            | Middle of the  |              | Feedback              | 1, 2 Delivery   |
|                        | course  |             |            | course   |              | forms                 | of course   |
| INDIRECT<br>ASSESSMENT | End of Cou<br>Survey                                      |             | 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.

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

2. Rubrics to be devised appropriately by the concerned faculty to assess Student activities/Mini Project..

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 / Mini project Assessment

| DIMENSION                        | Unsatisfactory<br>1   | Developing 2   | Satisfactory 3  | Good<br>4   | Exemplary 5  | Score |  |  |
|----------------------------------|---|--|---|---|--|-------|--|--|
| Collection of data               | Does not collect any information relating to the topic        | Collects<br>very limited<br>information;<br>some relate<br>to the topic              | Collects<br>some basic<br>information;<br>refer to the<br>topic       | Collects<br>relevant<br>information;<br>concerned<br>to the topic | Collects a great deal of information; all refer to the topic                             | 3     |  |  |
| Fulfill team's roles & duties    | Does not perform any duties assigned to the team role         | Performs<br>very little<br>duties  | Performs<br>nearly all<br>duties                                      | Performs all duties   | Performs all<br>duties of<br>assigned<br>team roles<br>with<br>presentation              | 4     |  |  |
| Shares work equally              | Always relies<br>on others to do<br>the work                  | Rarely does<br>the assigned<br>work; often<br>needs<br>reminding                     | Usually<br>does the<br>assigned<br>work; rarely<br>needs<br>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     |  |  |
| Listen to<br>other Team<br>mates | Is always<br>talking; never<br>allows anyone<br>else to speak | Usually<br>does most<br>of the<br>talking;<br>rarely<br>allows<br>others to<br>speak | Listens, but<br>sometimes<br>talk too<br>much                         | Listens and contributes to the relevant topic                     | Listens and contributes precisely to the relevant topic and exhibit leadership qualities | 3     |  |  |
|                                  | TOTAL 13  |  |   |   |  |       |  |  |

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

# **Scheme of Evaluation for End Exam**

| SN   | SN Scheme                                |    |  |  |  |  |
|--|--|----|--|--|--|--|
| 1  | Testing Skills/ Abilities from Unit - I  | 10 |  |  |  |  |
| 2  | 2 Writing steps on any one from Unit -II |    |  |  |  |  |
| 3  | Execution                                | 10 |  |  |  |  |
| 4  | 4 Presentation of Result                 |    |  |  |  |  |
| 5  | Viva voce                                | 10 |  |  |  |  |
|  | Total                                    | 50 |  |  |  |  |
| <ol> <li>Note:         <ol> <li>Candidate shall submit Lab Record for the Semester End Examination.</li> <li>Student shall be allowed to execute directly even if he / she is unable to write the procedure</li> <li>In case of change in experiment or no write up, marks will not be awarded for writing procedure/steps.</li> </ol> </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   | 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: Student: Computer** ratio in the Lab should be strictly **1:1** for a batch of twenty Students.

#### MODEL QUESTION BANK

Course Title: Basic Computer Skills Lab Course Code: 15CS11P

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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