



## BCA GUIDELINES FOR INTERNAL PRACTICAL EXAMINATION

This is to inform the students of Bachelor of Computer Application that due to COVID- 19 Pandemic **Internal Practical** will be conducted online for which a structured guideline is presented herewith which will guide you to prepare your **Project/Lab File**. Students must also note that submission of Project/Lab File is facilitated by the Institution through **FIMT Student Portal** from **05<sup>th</sup> May 2020 (Tuesday)** and will end on **09<sup>th</sup> May 2020 (Saturday)**.

Students should note that in order to appear in the viva of the subject they must have submitted all the Project/Lab File before the Last date failing which they will not be allowed to appear in viva, they will be marked **Absent** and **No Marks** will be awarded for the same.

Students are Suggested/Advise to Visit the Website of the Institution [www.fimt-ggsipu.org](http://www.fimt-ggsipu.org) and **Student Portal** for updates on regular basis.

*The following points need to keep in mind while preparing the soft copy of file as per syllabus.*

Practical File is part of the Course Curriculum of BCA. The Practical File & VIVA VOCE is of **100 marks (40 marks internal & 60 marks External)** as Per the University criteria. It is Mandatory for all the student to submit their Practical File Soft copy on Student Portal till **09<sup>th</sup> May 2020** as well as the Hard Copy of same on the day of External Project Evaluation. If any student fails to submit Practical File (hard copy and soft copy) they will not be able to clear their papers in Final Year University Exams.

### INSTRUCTIONS TO STUDENTS:

1. It is compulsory for all the students to make the Practical File.
2. Students are required to prepare their Practical File and get it evaluated by your faculty in charge as per timelines.
3. No output of two students should be identical, in any case, as this may lead to the cancellation of your Practical File.

Last Date to Submit Practical File to Subject Teacher by:

| S.No. | Contents                          | Date | Marks     |
|-------|-----------------------------------|------|-----------|
| 1     | File Submission on Student Portal |      | 10(Marks) |
| 2     | Internal Practical Assessment     |      | 20(Marks) |
| 3     | Submission Of Hard Copy           |      | 10(Marks) |

### GUIDELINES OF WRITING THE PRACTICAL FILE

#### FORMAT OF PRACTICAL FILE

##### 1. COVER PAGE

##### 2. INDEX

| S.NO. | NAME OF PROGRAM | SIGNATURE | REMARKS |
|-------|-----------------|-----------|---------|
|-------|-----------------|-----------|---------|

##### 3. AIM

##### 4. CODE

##### 5. OUTPUT SCREENSHOT

#### TYPING INSTRUCTIONS:

- Border Indents 0 Top, Bottom & Right – 1 Inch Left – 1.5 Inch
- Header – College Logo
- Footer : Name & Enrollment No.
- Page Numbering – Bottom centered
- Font Type – Times New Roman
- Font Color – Black only
- Font Size – Uniform & Consistent throughout the file.
- Program Heading – 16 (Bold) Titles – 14 (Bold) Normal Text – 12 (Regular)
- Line Spacing – 1.5
- Output Screen Shot – Color / Black & White

#### BINDING INSTRUCTIONS:

- Spiral Binding is Required

#### PRINTING INSTRUCTIONS:

- A4 Paper (Color/Black & white)

#### SUBMITTING PRACTICAL FILE:

Practical File is to be submitted to the Subject Teacher.



**FAIRFIELD Institute of Management & Technology**

(Affiliated to GGSIP University, New Delhi)



Grade Institute by DHE, Govt. of NCT Delhi, Affiliated to GGSIP University Delhi and Approved by Bar Council of India & NCTE

## BACHELOR OF COMPUTER APPLICATIONS

### Data Structure Lab (BCA 152)

| S.NO. | NAME OF PROGRAM   |
|-------|---|
| 1     | To implement a Linear Array.  |
| 2     | To create a Multidimensional array.   |
| 3     | To add Two Matrices   |
| 4     | To Subtract Two Multidimensional Array  |
| 5     | To implement a Singly Link List   |
| 6     | To implement Stack using Array  |
| 7     | To implement Stack using Linked List  |
| 8     | To implement Infix to Postfix conversion using Stack                                |
| 9     | To implement Infix to Prefix Conversion using Stack                                 |
| 10    | Implementation of queue in c using arrays   |
| 11    | Implementation of a Queue using Linked List   |
| 12    | To implement A Binary Tree (Insertion, Deletion, Traversal in a Binary Search Tree) |
| 13    | To implement an AVL Tree  |
| 14    | To Implement Insertion Sorting  |
| 15    | To implement Selection Sort   |
| 16    | To Implement Merge Sort   |
| 17    | To Implement Linear Search in an Array  |
| 18    | To Implement Linear Search using Linked List  |

## BACHELOR OF COMPUTER APPLICATIONS

### DBMS LAB (BCA 154)

| S.NO. | Name Of Program   |
|-------|---|
| 1     | To illustrate create table command  |
| 2     | To illustrate Insert values commands in SQL   |
| 3     | List all the information about all employees from emp table   |
| 4     | List all the information about all department from dept table   |
| 5     | List all employees names along with their salary from emp   |
| 6     | List all last name of employees belonging to the department 20  |
| 7     | List the name of clerks working in a department no. 20  |
| 8     | List the first names of analysts OR salesman  |
| 9     | List the names of employees who are not managers  |
| 10    | List the employee names and salary, whose salary is in between 10,000 & 20,000  |
| 11    | List the employees whose names start with "S"   |
| 12    | List the employee names having "T" as the second character  |
| 13    | List out the employees who are working in department 10 and draw the salaries more than 35,000  |
| 14    | List the employees no., first name, salary in ascending order of name of first name   |
| 15    | List of the employees name, salary, designation and department no. in ascending order of name of department no. and then descending order of salary |



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|    |  |
|----|--|
| 16 | List details of all employees residing in Delhi                                      |
| 17 | List the details of all employees not residing in Delhi                              |
| 18 | List the details of all employees residing in Delhi and earn more than 30,000        |
| 19 | List the no. of employees working with the company                                   |
| 20 | List the maximum salary of employees working as a salesman                           |
| 21 | List the average salary working in the department 20                                 |
| 22 | List the total salary payable to employees   |
| 23 | List the average no. of employees working in department 10                           |
| 24 | List the employees belonging to the department of marketing                          |
| 25 | Write a query to inner join two tables to display the first name and department name |



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## BACHELOR OF COMPUTER APPLICATIONS

### JAVA LAB (BCA 252)

| S.NO | NAME OF PROGRAM  |
|------|--|
| 1    | Java program to sort an array in ascending order   |
| 2    | Java program to concatenate two strings  |
| 3    | Java program to check palindrome string using recursion  |
| 4    | Java program to find factorial of number   |
| 5    | Java program to display Fibonacci series using loops   |
| 6    | Java program of simple inheritance in java   |
| 7    | Java program to implement constructor overloading by passing different parameters of different types |
| 8    | Java program to make calculator using switch case  |
| 9    | Java program to create a student report using applet   |
| 10   | Java program of multiple inheritance using interface   |
| 11   | Java applet program to show different shapes in java   |
| 12   | Java program to calculate square for a number using swing  |



**BACHELOR OF COMPUTER APPLICATIONS**

**WEB TECH LAB (BCA – 254)**

| <u>S.N</u><br><u>O</u> | Name of Program   |
|------------------------|---|
| 1                      | Introduction of HTML tags.                                      |
| 2                      | Write a program to illustrate use of body tag in html.          |
| 3                      | Write a program to illustrate use of paragraph tag.             |
| 4                      | Write a program to illustrate use of background color.          |
| 5                      | Write a program to illustrate use of image tag.                 |
| 6                      | Write a program to illustrate use of italic, underline and bold |
| 7                      | Write a program to illustrate use of font tag .                 |
| 8                      | Write a program to illustrate use of blockquote tag.            |
| 9                      | Write a program to illustrate use of anchor tag.                |
| 10                     | Write a program to illustrate use of nested html elements.      |
| 11                     | Write a program to illustrate use of marquee in html.           |
| 12                     | Write a program to illustrate use of table in html.             |

|    |   |
|----|---|
| 13 | Write a program to create resume in html .                        |
| 14 | Write a program to create form in html.                           |
| 15 | Write a program to create Form to submit password.                |
| 16 | Write a program to illustrate use of frame tag in html            |
| 17 | Write a program to illustrate use of line break tag .             |
| 18 | Write a program to illustrate a web page to add an audio          |
| 19 | Write a program to create a web page to display the use of frame. |
| 20 | Write a program using java script to find even and odd number.    |
| 21 | Write a program to find factorial of a no. Using click event.     |
| 22 | Write a webpage using external css.                               |





## BACHELOR OF COMPUTER APPLICATIONS

### LINUX LAB (BCA 352)

| S.NO. | NAME OF PROGRAM   |
|-------|---|
| 1     | Execution of various file/directory handling commands.                          |
| 2     | Simple shell script for basic arithmetic and logical calculations.              |
| 3     | Shell scripts to check various attributes of files and directories.             |
| 4     | Shell scripts to perform various operations on given strings.                   |
| 5     | Shell scripts to explore system variables such as PATH, HOME etc.               |
| 6     | Shell scripts to check and list attributes of processes.                        |
| 7     | Execution of various system administrative commands.                            |
| 8     | Write awk script that uses all of its features.                                 |
| 9     | Use sed instruction to process /etc/password file.                              |
| 10    | Write a shell script to display list of users currently logged in.              |
| 11    | Write a shell script to delete all the temporary files.                         |
| 12    | Write a shell script to search an element from an array using binary searching. |