PRAHLADRAI DALMIA LIONS COLLEGE OF COMMERCE & ECONOMICS
ISO 9001: 2015 Certified

NOTICE

3st March, 2025

ATKT Internal and Practical Examination
B.Sc.I.T. (SEMESTER-II)

INSTRUCTIONS FOR THE STUDENTS HAVING ATKT IN INTERNALS

1. Date of Submission of the Assignments- **10th March, 2025**
2. Timings 11:00 AM to 12:00 Noon. Reporting time for students: at least 10 minutes before the mentioned time. Venue: Computer Lab.
3. Students have to be present in person for the submission.
4. Submission of assignments to be done on proper A4 size paper, handwritten by the candidate himself only. The Front page should contain details of Roll no, Name of the student, Semester, Subject.
5. Print out of the questions uploaded should be attached along with the assignment. Students should enclose a photocopy of the ATKT fee paid receipt along with each of his projects.
6. On the date of submission there will be a viva voce on the given questions/topics. 7. If the student fails to present himself on the given date and time he will be marked ABSENT for the said subject.
8. Any Submissions after the above mentioned date and time will not be accepted and entertained under any circumstances.

NOTE - Student who has paid ATKT fees for internal components but has not been allotted questions or has any query is requested to contact Dr. Rupali Mishra on or before, 7th March 2025 by mailing on bscit@dalmialionscollege.ac.in

Prof. (Dr.) D. N. Ganjewar	Ms.Subhashini Naikar	CA Durgesh Kenkre	Dr. Rupali Mishra
(Coordinator - BSc.IT Exam)	**Convener**	**Vice- Principal, SFC**	**(Principal)**

DI/N-STD/GEN/00

Name Of The Student	Subject NameAnd Questions
TRIPATHI KUSHAL SHAILESH	**OBJECT ORINTED PROGRAMMING WITH C++ (PRACTICAL)** 1.Write a C++ program to implement a class and object for a bank system that includes deposit and withdrawal functionalities. 2. Implement a C++ program for function overloading where an `area()` function calculates the area of a circle, rectangle, and triangle. 3. Create a C++ program using a copy constructor to copy the values of one object into another.
	WEB APPLICATIONS DEVELOPMENT (PRACTICAL) **1**. Write a PHP script to upload and display an image on a webpage. 2. Implement a shopping cart system using PHP and MySQL. 3. Design a form in HTML with CAPTCHA validation using JavaScript.
RAJPUT VIJAY BHAWAR SINGH	**OBJECT ORINTED PROGRAMMING WITH C++** 1. Explain the key differences between object-oriented programming and procedural programming with suitable examples. 2. What is operator overloading in C++? Demonstrate with an example program. 3. Discuss the role of constructors and destructors in C++ with examples. 4. How does dynamic memory allocation work in C++? Explain with an example using `new` and `delete` operators. 5. Explain the concept of virtual functions and how they facilitate runtime polymorphism in C++. Provide an example.
SHAIKH AYAAN IQBAL	**OBJECT ORINTED PROGRAMMING WITH C++** 1.What are constructors in C++? Explain their types with suitable examples. 2. Explain the structure of a C++ program with a basic example. 3. What is file handling in C++? Explain different file opening modes in C++.

	4. Explain different types of inheritance in C++ with examples. 5. What is operator overloading? Demonstrate overloading the + operator in C++.
	FUNDAMENTALS OF MICROPROCESSOR AND MICROCONTROLLERS 1.Explain the architecture of the 8085 microprocessor with a neat diagram. 2. What are the different types of addressing modes in the 8085 microprocessor? Explain with examples. 3. Write an assembly language program to add two 8-bit numbers stored in memory. 4. Compare microprocessors and microcontrollers with suitable examples. 5. Explain the concept of interrupts in the 8051 microcontroller and their significance in embedded systems.
	NUMERICAL METHODS 1.What are truncation and round-off errors in numerical computing? Explain with examples. 2. Explain Newton-Raphson method for solving nonlinear equations. Derive its formula. 3. Discuss the Gauss-Seidel method for solving a system of linear equations. 4. What is Simpson's 1/3rd rule for numerical integration? Derive its formula. 5.Explain the concept of linear regression and its applications in numerical methods.
	GREEN IT 1. What is Green IT, and why is it important for sustainable computing? 2. Explain the key challenges associated with power consumption in IT infrastructure. 3. How does virtualization contribute to energy efficiency in data centers? 4. Discuss the role of recycling in Green IT and its impact on the environment. 5. Explain the concept of paperless offices and their advantages in an

	IT-driven organization.
	OBJECT ORINTED PROGRAMMING WITH C++ (PRACTICAL) 1.Implement a class template for a function that returns the maximum of two numbers. 2. Implement file handling in C++ to read and write student records. 3. Write a C++ program to create a simple calculator using classes and functions.

	FUNDAMENTALS OF DATABASE MANAGEMENT SYSTEMS PRACTICAL 1.Write SQL queries to create, modify, and drop a table in MySQL. 2. Implement primary key and foreign key constraints on an employee and department table. 3. Implement views in SQL to display specific columns from a table.
