PRAHLADRAI DALMIA LIONS COLLEGE OF COMMERCE & ECONOMICS

ISO 9001: 2015 Certified

NOTICE

Date: 27/03/2023

B.Sc. (Information Technology)

ATKT Internal/Practical Examination March' 2023
Semester III

INSTRUCTIONS FOR THE STUDENTS HAVING ATKT IN INTERNALS / PRACTICALS

1. The viva voce will be conducted offline.
2. Date of Submission of the Project 5th April, 2023- at 1.00 P.M. in the computer lab.
3. Students must write their Internal/practical ATKT project in their own handwriting on A4 size foolscap paper. On top of every page a student has to write his/her Complete Name, Program (Dept.), Semester, Roll no.,Class and Contact No.
4. Student has to attach a photocopy of questions allotted to him/her along with his answers.
5. Students have to attach an ATKT fee payment receipt along with his/her project.
6. On the date of submission, there will be a viva voce for which the student has to present himself/herself, failing which he/she will be marked absent.
7. Submissions after the above mentioned date and time will not be accepted and entertained under any circumstances.

Note: For any query mail to: bscit@dalmialionscollege.ac.in

Prof.Rupali Mishra	Prof. Durgesh Kenkre	Prof. Subhashini Naikar	Dr. Kiran Mane
(Coordinator)	(Exam convener)	(Vice- Principal, SFC)	(I/c Principal)

DI/R-IPS/EXAM/00

Semester III (Internal Exam)

Subject : Python Programming

Roll No	
203	1. Write a note on Conditional Statement in Python 2. Write a python program to accept a number from the user and reverse digits of given numbers. 3. List and explain types of errors in python. 4. Write a python program to check whether a number is prime or not.
208	1. List and explain the different features of Python 2. Explain the use of Brackets, Braces and Parentheses. 3. What is operator? What is operator precedence? List rules for operator precedence in python. 4. Write a python script to display 1st 10 Even and odd numbers separately using control statements.
214	1. What are Boolean functions? Write a program to justify Boolean functions. 2. What is string slicing? Illustrate variations in slicing with example. E “Python strings are mutable.” Is this statement valid in Python? Illustrate with example. 3. Illustrate the difference between remove() and pop() with example. 4. Are Tuples Mutable? Justify with example.
215	1. List and explain control statements in python 2. Write a python program to demonstrate infinite while loop 3. Write a python program to display first 20 odd numbers 4. List and explain features of python
219	1. Explain random module. 2. C List and explain any two principles of OOP with example. 3. What is module? How to create and use module in python 4. Write a python program to demonstrate infinite while loop
233	1. Write a note on Conditional Statement in Python 2. Write a python program to accept a number from the user and reverse digits of given numbers. 3. Write a python program to check whether a number is prime or not. 4. Write a python program to display first 20 even numbers
251	1. Write a note on Operator Precedence in Python 2. Write a python program to accept number from the user and display the sum of digits of given number 3. List and explain control statements in python 4. Write a python program to demonstrate infinite while loop
256	1. Explain the use of Brackets, Braces and Parentheses. 2. What is function? Explain the usage of functions with example 3. What are Boolean functions? Write a program to justify Boolean functions. 4. Write a note on Conditional Statement in Python

265	1. Write a note on Conditional Statement in Python 2. Write a python program to accept a number from the user and reverse digits of given numbers. 3. List and explain types of errors in python. 4. List and explain features of python
266	1. Write a note on Conditional Statement in Python 2. Write a python program to accept a number from the user and reverse digits of given numbers. 3. Explain random module. 4. C List and explain any two principles of OOP with example.
269	1. Write a python program to accept a number from the user and reverse digits of given numbers. 2. List and explain types of errors in python. 3. Write a python program to check whether a number is prime or not. 4. Write a python program to display first 20 even numbers

Subject : Computer Networks

Roll No	Name of the Student
207	1. How can a balance be maintained with Completeness and Clarity as the principles for effective communication? 2. Discuss any three barriers that lead to communication breakdown in an organization 3. 'Gestures are observed actions' – Elaborate. 4. State the advantages and disadvantages of grapevine communication.
208	1. Discuss about different communication styles highlighting low and high context cultures. 2. Discuss the need for using technology in business communication 3. Briefly explain the five major stages involved in writing effective business messages 4. What are the main components of an effective introduction?
219	1. Which format (chronological/functional/combination) of resume is suitable for a fresh graduate and why? 2. Explain any five variables that create barriers for effective listening. 3. As a General Secretary of the Student's Council of your college, submit the report to the Principal on the necessity of opening a fully equipped gymkhana in your college. 4. How can you overcome stage fright during a presentation?

232	1. State the various purposes of team presentations. 2. What is the role of human resource communication in an organization? 3. Explain the difference between meetings and conferences. 4. What are some specific principles for effective writing of minutes?
233	1. What are the constituents of financial communication? 2. Explain with the help of a diagram the organizational communication 3. What are the various aspects of corporate communication? 4. Discuss the two types of organizational conflicts with suitable examples.
251	1. Write a note on basic communication model 2. Briefly explain any two ethical perspectives. 3. What is AIDA? Explain its term.
253	1. How will you plan and prepare for Negotiation? 2. Explain the plain stage in detail. 3. State the importance of creating outline in executing stage
254	1. What are the steps for executing the presentations? 2. Explain the importance of impress stage. 3. Define Chunking and explain its theory. 4. What are the Concepts of Map?
255	1. Explain the importance of impress stage. 2. Define Chunking and explain its theory. 3. What are the Concepts of Map?
256	1. Explain with the help of a diagram the organizational communication 2. What are the various aspects of corporate communication? 3. Discuss the two types of organizational conflicts with suitable examples.
262	1. Explain any five variables that create barriers for effective listening. 2. As a General Secretary of the Student's Council of your college, submit the report to the Principal on the necessity of opening a fully equipped gymkhana in your college. 3. How can you overcome stage fright during a presentation?
263	1. Discuss the need for using technology in business communication 2. Briefly explain the five major stages involved in writing effective business messages 3. What are the main components of an effective introduction?
265	1. Discuss any three barriers that lead to communication breakdown in an organization 2. 'Gestures are observed actions' – Elaborate. 3. State the advantages and disadvantages of grapevine communication.

269	1. As a General Secretary of the Student's Council of your college, submit the report to the Principal on the necessity of opening a fully equipped gymkhana in your college. 2. How can you overcome stage fright during a presentation? 3. Discuss the need for using technology in business communication 4. Briefly explain the five major stages involved in writing effective business messages

Subject : DBMS

Roll No	
251	1. Explain single row function with example of each 2. Write short note on Set operator 3. Write a short note on Views in DBMS. 4. Write short note on Referential integrity
265	1. Write a short note on business rules. 2. Write short note on users in DBMS 3. Explain any 5 single row functions with an example 4. Write short note on PL/SQL Block

Subject : Applied Mathematics (Internal)

Roll No	
203	1. Solve $(p-2x)(p-y)=0$ 2. Solve : $y = xp + \frac{1}{p}$ 3. Find the Laplace transform of $f(t)=\begin{cases}\cos t & 0<t<\pi \\ \sin t & t>\pi\end{cases}$ 4. Take Expression as a single integral and evaluate $\int_0^{a/\sqrt{2}}\int_0^{x} x\,dx\,dy+\int_{a/\sqrt{2}}^{a}\int_0^{\sqrt{a^2-x^2}} x\,dx\,dy$ 5.

Subject : DATA STRUCTURE

Roll No	
203	1. Write a short note on Data Structure. 2. Explain Theta Notations with suitable diagram 3. What are the desired characteristics of an algorithm? Explain. 4. How sparse matrix is represented in memory? Explain.
232	1. What is Linked List? What are the operations that can be performed on the Linked List? 2. Write and explain an algorithm to insert a new element into circular linked list. 3. Explain the applications of circular linked list. 4. Write an algorithm to insert and delete a node at the beginning of Singly linked list.
240	1. Write algorithm for push and pop operations of a stack. 2. What are the applications of Stack? Explain. 3. Define Graph? What are the operations that can be performed on Graph? 4. Explain Kruskal's Algorithm with example
251	1. Define Hashing and explain the terms: Hash Table and Hash Function. 2. How insertion operations take place in Queue? Explain. 3. Write a short note on linear and non linear data structure. 4. How sparse matrix is represented in memory? Explain.
255	1. Write a short note on linear and non linear data structure. 2. How one dimensional array is represented in memory? Explain. 3. What are the advantages of linked list over an array? 4. Explain various applications of circular linked list.
265	1. Explain Kruskal's Algorithm with example 2. Define Hashing and explain the terms: Hash Table and Hash Function. 3. How insertion operations take place in Queue? Explain. 4. What are the advantages of linked list over an array?
269	1. Write algorithm for push and pop operations of a stack. 2. What are the applications of Stack? Explain. 3. Write an algorithm for insertion sort. 4. What is Searching? Explain different types of searching methods.

Subject : Python Programming (Practical)

Note : Write the answer with Aim, Code, and Output screenshot.

ROLL NO	NAME OF STUDENT
201	1. Write a program to generate the Fibonacci series. 2. Write a recursive function to print the factorial for a given number.
203	1. Write a program that reverses the user defined value. 2. Write a Python program to clone or copy a list
206	1. Implement the concept of inheritance using python 2. Write a Python program to append text to a file and display the text.

233	1. Write a Python program to append text to a file and display the text. 2. Design a class that store the information of student and display the same

Subject : DATA PRACTICAL (Practical)

Note : Write the answer with Aim, Code, and Output screenshot.

ROLL NO	
203	1. Write a program to implement MERGE sort. 2. Read the two arrays from the user and merge them and display the elements in sorted order.
206	1. Read the two arrays from the user and merge them and display the elements in sorted order. 2. Demonstrate the use of queue in Data Structure with the help of an example. (Write its code and output with explanation)
207	1. Write a program to perform the Matrix addition, Multiplication and Transpose Operation. 2. Explain binary search with the help of an example (Write its code and output with explanation)
208	1. Write a program to implement the concept of Stack with Push, Pop, Display and Exit operations. 2. Write a program to implement SELECTION sort.
214	1. Write a program to store the elements in a 1-D array and perform the operations like searching, sorting and reversing the elements. 2. Read the two arrays from the user and merge them and display the elements in sorted order.
219	1. Write a program to perform the Matrix addition, Multiplication and Transpose Operation. 2. Write a program to search the element using sequential search.
233	1. Write a program to implement the concept of Stack with Push, Pop, Display and Exit operations. 2. Write a program to implement bubble sort.
251	1. Explain linear search with the help of an example (Write its code and output with explanation) 2. Explain binary search with the help of an example (Write its code and output with explanation)
254	1. Demonstrate Insertion Sort with the help of an example. (Write its code and output with explanation) 2. Read the two arrays from the user and merge them and display the elements in sorted order.
255	3. Write a program to store the elements in a 1-D array and perform the operations like searching, sorting and reversing the elements. 4. Demonstrate the use of queue in Data Structure with the help of an example. (Write its code and output with explanation)

Subject : DBMS (Practical)

Note : Write the answer with Aim, Code, and Output screenshot.

ROLL NO	NAME OF STUDENT
203	Creating table with constraints: 1. NOTNULL 2. UNIQUE 3. PRIMARY KEY 4. ,FOREIGN KEY
207	Write queries using Group By, Having clause, Order By clause
215	Write queries with functions : AVG,MIN,MAX,SUM,COUNT
233	Write queries with functions : ABS,SQRT,ROUND,TRUNCATE,SIGN,POWER,MOD,FLOOR,CEIL
251	Write an example of View for : a. Creating view b. Dropping view c. Selecting from a view
256	Write an example of creating and replacing a trigger
265	Write sant 5 single like sql queries with output
269	Write examples of a. Using INSERT statement b. Using UPDATE statement c. Using DELETE statement

Subject : MOBILE PROGRAMMING (Practical)

Note : Write the answer with Aim, Code, and Output screenshot.

ROLL NO	NAME OF STUDENT
206	1. Create the Mobile app for Currency & Temperature Convertor using Cordova Environment. 2. How to install and use a Battery status Plugin.
208	1. How to install and use Device plugin 2. How to install and use Camera plugin
233	1. Create the Mobile app for Currency & Temperature Convertor using Cordova Environment. 2. How to install and use a Battery status Plugin.
254	1. Elaborate the process of Cordova environment setup 2. Create and build a simple “HELLO WORLD” App using Cordova.
255	1. Create and build a simple “GRADE CARD” App using Cordova. 2. Create and build a simple “CALCULATOR” App using Cordova.