PRAHLADRAI DALMIA LIONS COLLEGE OF COMMERCE & ECONOMICS

ISO 9001: 2015 Certified

NOTICE

B.Sc.(I.T.)

ATKT Internal/Practical Examination October 2021

Semester I and III 2021

INSTRUCTIONS FOR THE STUDENTS HAVING ATKT IN INTERNALS/PRACTICALS

1. **Date of Submission of the Projects- on or before 28 October 2021, by 12 Noon.**
2. Semester III ATKT practical exam will be conducted along with the regular practical exam. Students are expected to submit journals on or before the submission date. Regular & ATKT Practical exam of Sem III time table link is : https://www.dalmialionscollege.ac.in/wp-content/uploads/Practical-Exam-Notice.docx-4.pdf
3. Project/ assignment has to be handwritten on A4 size paper or Foolscap paper. On top of every page a student should write his name, Seat No. and Subject.
4. Practical submission must be handwritten with proper output drawn / screenshot.
5. Students are expected to write the question followed by the answer.
6. **Student has to scan the ATKT fee payment receipt as well as all the pages of his project answer sheets and upload the same on the following google form link. https://forms.gle/1KL1RT6y6ckVBrCy7**
7. On 29-October-21 there will be a viva voce on the given questions, link for viva voce is : https://meet.google.com/irb-njph-kdx at 10:00 am.
8. If the student fails to submit the project on or before the given date and time he will be marked **ABSENT for the said subject.**
9. **Any submission after the above mentioned date and time will not be accepted and entertained under any circumstance.**
10. **Those students who had FILLED THE FORM & PAID THE FEES and still have NOT been allocated questions in the following list, please send a mail along with attachment of fee receipt to bscit.pdlc@gmail.com on or before 12.00 noon, 15 October, 2021.**

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

Date : 11-10-21

DI/N-STD/GEN/00

ATKT Internal/Practical Exam Questions October 2021

Semester I and III 2021

Semester III

Subject : Data Structures Theory

Roll No	Name of the Student
207	GUPTA ROHIT RAJESH 1. Explain different types of queues in data structures. 3 2. How is binary search different from linear search? 3 3. Explain Doubly Linked List. 3 4. Define graph and list any three applications of graph 5. Write a program to store the elements in a 1-D array and perform the operations like searching, sorting and reversing the elements.
228	SHAIKH IBRAHIM MD ALLAHUDDIN Write short notes on: 1. Asymptotic notations 2. Double Ended Queue(De-Queue) 3. Insertion Sort 4. DFS and BFS 5. Read the two arrays from the user and merge them and display the elements in sorted order.

Subject : DBMS Theory

Roll No	Name of the Student
228	SHAIKH IBRAHIM MD ALLAHUDDIN 1. Construct an E-R diagram for a Library Management System. Convert the E-R Diagram to Tables. 2. Explain types of integrity constraints with example. 3. What is Normalization? Explain 1NF, 2NF, 3NF, and BCNF. 4. Describe the overall architecture of DBMS with suitable diagram. 5. Explain Log based recovery.

Semester I

Subject : Imperative Programming (Theory)

Roll No	Name of the Student
156	DAYAMA PRAMOD NAVALKISHOR 1. Explain the loop with an example. 2. Write a short note on Algorithms. 3. Define array? What are the different types of array? 4. Define Operator. What are the different types of operators? Explain.

Subject : Imperative Programming (Practical)

Roll No	Name of the Student
128	SHAIKH IBRAHIM MD ALLAHUDDIN 1. Write a program to swap two numbers without using a third variable. 2. Write a program to display the addition of the first 20 even numbers.
169	PAL RAHUL AWADHNARAYAN 1. Write a program to check whether the number is positive, negative or zero. 2. Write a program to find the factorial of a number.

Subject : Digital Electronic (Theory)

Roll No	Name of the Student
156	DAYAMA PRAMOD NAVALKISHOR 1. What is a logic gate? List and explain basic gates. 2. Write a note on Universal Gates. 3. Draw the logic diagram for full adder and its truth table. 4. What is a register? How are the registers designed?

128	SHAIKH IBRAHIM MD ALLAHUDDIN 1. Explain the combinational logic circuit with a neat labelled diagram. 2. Write a note on full adder. 3. Justify the universality of NOR gate. 4. Write a note on Flip - Flop

Subject : Digital Electronic (Practical)

Roll No	Name of the Student
156	DAYAMA PRAMOD NAVALKISHOR 1. Design and implement Half adder 2. Implement Universal Gates.
128	SHAIKH IBRAHIM MD ALLAHUDDIN 1. Implement the given Boolean expressions using minimum number of gates for De Morgan's Theorem 2. Design and implement 4:1 multiplexer

Subject : Operating System (Theory)

Roll No	Name of the Student
156	DAYAMA PRAMOD NAVALKISHOR 1.Define Operating System. 2.Explain main components of O.S. 3.Explain MS-DOS file System. 4. What are the different types of Operating System? Explain
157	YADAV AAYUSH PRADEEP 1. Explain DMA (Direct Memory Access) using a suitable diagram. 2. What are the different types of storage devices? Explain. 3. Explain the history of computer. 4. Write a short note on Linux Operating System.

Subject : Operating System (Practical)

Roll No	Name of the Student
169	PAL RAHUL AWADHNARAYAN 1. Install Linux OS on a virtual machine (VMWare). 2. Perform the following DOS commands i) md ii) time iii) date iv) ver v) xcopy

Subject : Discrete Maths (Theory)

Roll No	Name of the Student
156	DAYAMA PRAMOD NAVALKISHOR 1. Define Universal Existential Statement and Existential Universal Statement. Give examples of each. 2. Find the number of integers between 1 and 250 that are divisible by 2 or 3 or 5 or 7. 3. Define Cartesian product. Let R denote the set of all real numbers. Describe R x R. 4. Use the quotient-remainder theorem with d = 3 to prove that the product of any three consecutive integers is divisible by 3. Use the mod notation to rewrite the result
128	SHAIKH IBRAHIM MD ALLAHUDDIN 1. Disprove the following by giving two counter examples: i. For all real numbers a and b, if a < b then a2 < b2. ii. For all integers n, if n is odd then (n – 1)/2 is odd. iii. For all integers m and n, if 2m + n is odd then m and n are both odd. 2. Let R be the set of all real numbers and define a relation R on R × R as follows: For all (a , b) and (c , d) in R × R, (a , b) R (c , d) ⇔ either a < c or both a = c and b ≤ d. 3. A bakery produces six different kinds of pastry, one of which is eclairs. Assume there are at least 20 pastries of each kind. i. How many different selections of twenty pastries are there? ii. How many different selections of twenty pastries are there if at least three must be eclairs? 4. Find the number of integers between 1 and 150 that are divisible by 2 or 3 or 5 or 7.

Subject : Discrete Maths (Practical)

Roll No	Name of the Student

156	DAYAMA PRAMOD NAVALKISHOR 1. Write a Scilab program for Sum rule principle. 2. Write a Scilab program for Minimum spanning tree
128	SHAIKH IBRAHIM MD ALLAHUDDIN 1. Write a Scilab program for Permutations. 2. Write a Scilab program for Greatest Common Divisor.

Subject : Communication Skill (Theory)

Roll No	Name of the Student
156	DAYAMA PRAMOD NAVALKISHOR 1 What are the different roles of a manager? Explain. 2. State the differences between direct approach and indirect approach to business message. 3. Enlist the key points in the process of briefing. 4. How to create an outline for the presentation?

Subject : Communication Skill (Practical)

Roll No	Name of the Student
128	SHAIKH IBRAHIM MD ALLAHUDDIN 1. Draft a job application letter to Reliance for the position of a sales representative. Use a word processor to write the application. 2. Critically analyze the link provided http://gooogle.com website. Give your comments on the following using feedback technique. Home page, headings, use of color, navigating to hyperlinks, highlighting techniques and reader friendliness.