PRAHLADRAI DALMIA LIONS COLLEGE OF COMMERCE & ECONOMICS

ISO 9001: 2015 Certified

NOTICE

Date: 15/11/2022

B.Sc. (Information Technology)

ATKT Internal/Practical Examination November 2022
Semester I

INSTRUCTIONS FOR THE STUDENTS HAVING ATKT IN INTERNALS / PRACTICALS

1. **Date of Submission of the Projects- 25th November, 2022 at 2pm in Computer Lab.**
2. Assignment has to be handwritten on A4 size paper or Foolscap paper. On top of every page a student should write his name, Roll No. and Subject.
3. Students are expected to write the question followed by the answer.
4. On the date of submission there will be viva voce on the given questions. .If the student does not submit his/her assignment/project or does not give his viva voce then he will be declared as **ABSENT.**
5. Any submission after the above mentioned date and time will not be accepted and entertained under any circumstance.
6. On the date of viva voce the dress code will be formal
7. 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@dalmialionscollege.ac.in on or before 17th November 2022 by 12.00 noon.

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 I (Internal Exam)

Subject : Imperative Programming

Roll No	Name of the Student
163	**YADAV ROHIT KRISHNA** 1. Explain the different types of programming languages. 2. Explain the different steps in the program development cycle 3. Draw the flowchart and pseudocode of program that doubles a number. 4. Describe the structure of a C program.
150	**JENCY ANTHONY** 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 : Digital Electronics

Roll No	Name of the Student
149	YADAV SURAJKUMAR SABHAJEET 1. State De-Morgan's theorem and mention its use. 2. Express the function Y= A+ BC in canonical POS. 3. Convert the given decimal numbers to their binary equivalent 108.364, 268.025. 4. Why totem pole outputs cannot be connected together? 5. Simplify the following Boolean expression into one literal. W'X(Z'+YZ) + X(W+Y'Z).
163	YADAV ROHIT KRISHNA 1. Convert (115)10 and (235)10 into hexadecimal numbers. 2. Define 'Minterm' and ' Maxterm'. 3. Draw an active high tri-state Gate & write its truth table. 4. Show how to connect NAND gates to get an AND gate and OR gate? 5. State Distributive law and Duality principle.

Subject : Operating Systems

Roll No	Name of the Student
153	TIWARI VIKRANT SHIVPUJAN 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
163	YADAV ROHIT KRISHNA 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 computers. 4. Write a short note on Linux Operating System.

Subject : Discrete Mathematics

Roll No	Name of the Student
163	YADAV ROHIT KRISHNA a. A relation R from $\mathbf{R}$ to $\mathbf{R}$ as follows: For all $(x, y) \in \mathbf{R} \times \mathbf{R}$, $x\,R\,y \Leftrightarrow y = 2|x|$. Draw the graphs of R and R^{-1} in the Cartesian plane. Is R^{-1} a function? b. A relation T on $\mathbf{Z}$ (the set of all integers) is defined as follows: For all integers m and n, $m\,T\,n \Leftrightarrow 3 \mid (m - n)$. Is T reflexive? Is T symmetric? Is T transitive? Prove. c. If A is a set, R is an equivalence relation on A, and a and b are elements of A, then either $[a] \cap [b] = \emptyset$ or $[a] = [b]$. d. State and prove the handshake theorem. e. Show that the graph below does not have an Euler circuit.

Subject : Communication Skills

Roll No	Name of the Student
163	YADAV ROHIT KRISHNA Write short note on : (i) Radio as a Mode of Communication. (ii) Maps and Charts as a Medium of Non Verbal Communication. (iii) The Features of Effective Communication (iv) Significance of Communication in an Organisation (v) Criteria in choosing the Methods of Communication.

Subject : Imperative Programming (Practical)

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

ROLL NO	NAME OF STUDENT
149	YADAV SURAJKUMAR SABHAJEET 1. Write a program to find the factorial of a number using recursive function. 2. Write a program to find the largest value that is stored in the array.
153	TIWARI VIKRANT SHIVPUJAN 1. Write a program to demonstrate the use of pointers. 2. Write a program to perform addition and subtraction of two pointer variables.
163	YADAV ROHIT KRISHNA 1. Write a program to find whether a given number is palindrome or not. 2. Write a program to reverse the digits of an integer.
150	JENCY ANTHONY SWAMY

	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 : Operating Systems (Practical)

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

ROLL NO	NAME OF STUDENT
149	YADAV SURAJKUMAR SABHAJEET 1. Windows (DOS) Commands – Diskcomp, diskcopy, diskpart, doskey, echo 2. Working with Paint
153	TIWARI VIKRANT SHIVPUJAN 1. Windows (DOS) Commands – Edit, fc, find, rename, set, type, ver 2. Installation of Linux operating system (RedHat / Ubuntu) on virtual machine.
163	YADAV ROHIT KRISHNA 1. Installation of Windows operating system on virtial machine. 2. Working with Wordpad

Subject : Digital Electronics (Practical)

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

ROLL NO	NAME OF STUDENT
132	PAL MANDEEP TIRTHRAJ 1. Study of AND, OR, NOT, XOR, XNOR, NAND and NOR gates 2. Implement the given Boolean expressions using a minimum number of gates - Verifying De Morgan's laws.
149	YADAV SURAJ KUMAR SABHAJEET 1. Implement the given Boolean expressions using a minimum number of gates - Implement other given expressions using a minimum number of gates. 2. Implement other given expressions using a minimum number of ICs.
153	TIWARI VIKRANT SHIVPUJAN 1. Design and implement Binary – to – Gray code converter. 2. Design and implement a 2-bit by 2-bit multiplier.
163	YADAV ROHIT KRISHNA 1. Design and implement a 4:1 multiplexer. Study of IC 74153, 74157 2. Implement the given expression using IC 74151 8:1 multiplexer.
118	KOKARE TANMAY VIJAY 1. Design and implement a 2-bit comparator. 2. Design and implement Binary – to – BCD code converter

Subject : Discrete Maths (Practical)

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

ROLL NO	NAME OF STUDENT
132	PAL MANDEEP TIRTHRAJ Write the programs using SCILAB (Probability Theory) 1. Multiplication theorem for conditional probability 2. Finite probability spaces
149	YADAV SURAJKUMAR SABHAJEET Write the programs using SCILAB (Counting) 1. Binomial coefficients 2. Combinations
153	TIWARI VIKRANT SHIVPUJAN Write the programs using SCILAB (Set Theory) 1. Power Sets 2. Mathematical Induction

Subject : Communication Skills (Practical)

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

ROLL NO	NAME OF STUDENT
132	PAL MANDEEP TIRTHRAJ Project on the topic “E-Waste Management” (Minimum 5 pages)
153	TIWARI VIKRANT SHIVPUJAN Project on the topic “Seven Cs of Effective Communication:” (Minimum 5 pages)