



PRAHLADRAI DALMIA LIONS COLLEGE OF COMMERCE & ECONOMICS

ISO 9001: 2015 Certified

NOTICE

Date: 17/3/2022

B.Sc. (Information Technology)

**ATKT Internal/Practical Examination March 2022
Semester III**

INSTRUCTIONS FOR THE STUDENTS HAVING ATKT IN INTERNALS / PRACTICALS

1. **Date of Submission of the Projects- 31st March,2022 at 11am in Classroom T10.**
2. 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.
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 21st March 2022 12.00 noon.

Prof. Rupali Mishra
(Coordinator)

Prof. Durgesh Kenkre
(Exam convener)

Prof. Subhashini Naikar
(Vice- Principal, SFC)

Dr. Kiran Mane
(I/c Principal)

DI/R-IPS/EXAM/00

Semester III

Subject : Applied Mathematics (Internal)

Roll No	Name of the Student
250	<p>SHAIKH AWEZ AIJAZ</p> <p>Reduce the matrix to normal form and find its rank where</p> $A = \begin{bmatrix} 1 & -1 & 3 & 6 \\ 1 & 3 & -3 & -4 \\ 5 & 3 & 3 & 11 \end{bmatrix}$ <p>1.</p> <p>Examine for consistency the system of equations $x - y - z = 2$; $x + 2y + z = 2$; $4x - 7y - 5z = 2$ and solve them if found consistence.</p> <p>2.</p> <p>Express in Polar form $-1 + \sqrt{3}i$ By comparing the complex number with standard form.</p> <p>3.</p> <p>Simplify $\frac{(\cos\theta - i\sin\theta)^6 (\cos 5\theta - i\sin 5\theta)^{-2}}{(\cos 8\theta + i\sin 8\theta)^{1/2}}$ using De-Moivre's theorem.</p> <p>4.</p>
251	<p>SONI JIGAR</p> <p>Verify Cayley – Hamilton Theorem for the matrix A.</p> $A = \begin{bmatrix} 1 & 2 & -2 \\ -1 & 3 & 0 \\ 0 & -2 & 1 \end{bmatrix}$ <p>1.</p> <p>Express in Polar form $-1 + \sqrt{3}i$ By comparing the complex number with standard form.</p> <p>2.</p> <p>Simplify $\frac{(\cos\theta - i\sin\theta)^6 (\cos 5\theta - i\sin 5\theta)^{-2}}{(\cos 8\theta + i\sin 8\theta)^{1/2}}$ using De-Moivre's theorem.</p> <p>3.</p> <p>Prove that : $\therefore \sinh^{-1} x = \log(x + \sqrt{x^2 + 1})$</p> <p>4.</p>
259	<p>KHADKA SAGAR</p> <p>1. Solve $y^2 - x^2 \frac{dy}{dx} = xy \frac{dy}{dx}$</p> <p>2. Solve $\frac{dy}{dx} + 2y \tan x = \sin x$</p>

	<p>Find the Laplace transform of the following.</p> <p>3. $\frac{dy}{dt} + 3y(t) + 2\int_0^t y(t)dt = t; \text{ given } y(0) = 0$</p> <p>4. Evaluate : $\int_0^1 \int_0^y xy e^{-x^2} dx dy$</p>
265	<p>SAHIL AHMED</p> <p>1. Solve $(p - 2x)(p - y) = 0$</p> <p>2. Solve : $y = xp + \frac{1}{p}$</p> <p>3. Find the Laplace transform of $f(t) = \begin{cases} \cos t & 0 < t < \pi \\ \sin t & t > \pi \end{cases}$</p> <p>Take Expression as a single integral and evaluate</p> <p>4. $\int_0^{a/\sqrt{2}} \int_0^x x dx dy + \int_{a/\sqrt{2}}^a \int_0^{\sqrt{a^2-x^2}} x dx dy$</p>
266	<p>GUPTA VIKAS</p> <p>1. Solve : $(D^2 + 6D + 9)y = 5^x - \log 2$</p> <p>2. Solve : $x^2 \frac{d^2y}{dx^2} - x \frac{dy}{dx} - 3y = 0$</p> <p>3. Evaluate by using Laplace transform $\int_0^{\infty} t^2 e^{-t} \sin t dt$</p> <p>4. Evaluate $\int_0^a \int_0^{\sqrt{a^2-y^2}} (\sqrt{a^2-x^2-y^2}) dx dy$</p>

Subject :Python Programming (Practical)

Roll No	Name of the Student
207	<p>GARADKAR ROHIT MAHADEV</p> <ol style="list-style-type: none"> Write a program to generate the Fibonacci series. Write a recursive function to print the factorial for a given number.
232	<p>PATHAK ABHISHEK PREMSHANKAR</p> <ol style="list-style-type: none"> Write a function that takes a character (i.e. a string of length 1) and returns True if it is a vowel, False otherwise. Write a function to check the input value is Armstrong and also write the function for Palindrome.

233	<p>PATHAK SHUBHAM DURGAPRASAD</p> <ol style="list-style-type: none"> 1. Write a program that reverses the user defined value. 2. Write a Python program to clone or copy a list
244	<p>VERMA PUNIT RAMSWARUP</p> <ol style="list-style-type: none"> 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
269	<p>PANDEY RAJESH LAXMIKANT</p> <ol style="list-style-type: none"> 1. Implement the concept of inheritance using python 2. Write a Python program to append text to a file and display the text.

Subject :Data Structures (Practical)

Roll No	Name of the Student
207	<p>GARADKAR ROHIT MAHADEV</p> <ol style="list-style-type: none"> 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. Demonstrate the use of queue in Data Structure with the help of an example. (Write its code and output with explanation)
211	<p>GUPTA ROHAN GANGAPRASAD</p> <ol style="list-style-type: none"> 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.
212	<p>GUPTA SONALI RAJENDRA</p> <ol style="list-style-type: none"> 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)
232	<p>PATHAK ABHISHEK PREMSHANKAR</p> <ol style="list-style-type: none"> 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.
269	<p>PANDEY RAJESH LAXMIKANT</p> <ol style="list-style-type: none"> 1. Write a program to perform the Matrix addition, Multiplication and Transpose Operation. 2. Write a program to search the element using sequential search.

Subject :Database Management System (Practical)

Note : Create table for each question and show the respective query and output of the same.

Roll No	Name of the Student
207	GARADKAR ROHIT MAHADEV 1. Write and explain any 5 mysql queries on Creating database, creating table, sorting table, renaming table, deleting table, updating table. 2. Explain packages with the help of an example
259	KHADKA SAGAR RAMESH 1. Explain the update query with the help of an example. 2. Explain the alter query with the help of an example.
269	PANDEY RAJESH LAXMIKANT 1. Explain all join operations with the help of a table 2. Explain triggers with the help of an example.

Subject :Mobile Programming (Practical)

Roll No	Name of the Student
205	GAIKWAD PRATHMESH CHANDRAKANT 1. Elaborate the process of Cordova environment setup 2. Create and build a simple "HELLO WORLD" App using Cordova.
207	GARADKAR ROHIT MAHADEV 1. Create and build a simple "GRADE CARD" App using Cordova. 2. Create and build a simple "CALCULATOR" App using Cordova.
211	GUPTA ROHAN GANGAPRASAD 1. Create the Mobile app for Currency & Temperature Convertor using Cordova Environment. 2. How to install and use a Battery status Plugin.
214	GUPTA VIVEK NANDU 1. How to install and use Device plugin 2. How to install and use Camera plugin
269	PANDEY RAJESH LAXMIKANT 1. Create the Mobile app for Currency & Temperature Convertor using Cordova Environment. 2. How to install and use a Battery status Plugin.