



THE MOGAVEERA VYAVASTHAPAKA MANDALI

MVM Educational Campus

"Creating Quality...Delivering Excellence"

M V Mandali's Colleges of Commerce & Science

NAAC ACCREDITED

(Affiliated to University of Mumbai)

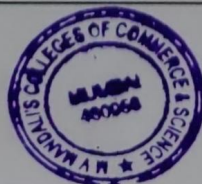
Assignment for ATKT – Internal exam – September 2023.

Program : B.Sc. - IT

Note:

- All assignments are to be submitted in assignment sheets only.
- All students should mention their name and allotted examination seat number on the 1st page of assignment.
- All submissions are to be made on 6th October, 2023 from 11:00 am to 01:00 pm only.

SEMESTER – I
SUBJECT : Programming Principles with C
ASSIGNMENT TO BE SUBMITTED TO : Ms. Priya
QUESTIONS: 1) What are keywords? Give information about any 5 keywords 2) Write short notes on Expressions 3) Brief about Array of Structures 4) How to return array from function Give example 5) Write short note on infinite loops
SUBJECT : Digital Logic & Applications
ASSIGNMENT TO BE SUBMITTED TO : Mr. Divyesh
QUESTIONS: 1) Write short on ASCII 2) Convert Decimal to Binary a) 127 b) 336 3) Define a) Byte b) Nibble c) word d) Bit 4) State & Prove DeMorgan's 1 st theorem 5) State & Prove DeMorgan's 2 nd theorem



SUBJECT : Fundamentals Database Management Systems

ASSIGNMENT TO BE SUBMITTED TO : Ms. Shweta Pawar

QUESTIONS:

- 1) What is dbms? Explain advantages & disadvantages of dbms.
- 2) Explain ER diagram.
- 3) What is join? Explain different types of joins.
- 4) Explain normalization.
- 5) What are database recovery techniques? Explain in brief.

SUBJECT : Technical Communication Skills

ASSIGNMENT TO BE SUBMITTED TO : Ms. Jyoti

QUESTIONS:

- 1) Explain the 7C's of Communication.
- 2) Explain Levels of Communication.
- 3) What is Business Conversation?
- 4) Define Specific Communication needs.
- 5) Explain Body Language in detail.

SEMESTER - II

SUBJECT : Object Oriented Programming with C++

ASSIGNMENT TO BE SUBMITTED TO : Ms. Priya

QUESTIONS:

- 1) Explain the terms Dynamic Binding
Message Passing
- 2) Explain the constructors and destructors
- 3) What is an abstract class
- 4) Write a program to read a file in C++
- 5) When do we use multiple catch statements



SUBJECT :	Numerical Methods.
ASSIGNMENT TO BE SUBMITTED TO :	Divyesh
QUESTIONS:	<p>1) Explain i) Truncation errors ii) Round off errors</p> <p>2) Use Falsei method $2x - 3\sin x - 5 = 0$</p> <p>3) By Newton Raphson method find the roots of Eqⁿ $x \tan x = 1$</p> <p>4) Use Secant method $x \tan x = 1$</p> <p>5) Explain mathematical model with example.</p>

SUBJECT :	Fundamentals of Microprocessor.
ASSIGNMENT TO BE SUBMITTED TO :	Shweta

QUESTIONS:	<p>1) Explain Data transfer instructions.</p> <p>2) Explain 8085 microprocessor architecture.</p> <p>3) Explain bus architecture of 8085.</p> <p>4) What is interrupt? Explain different types of interrupts in 8085.</p> <p>5) What is memory & I/O map? Explain in brief.</p>
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SEMESTER - III

SUBJECT : Data Structures
ASSIGNMENT TO BE SUBMITTED TO : Ms. Priya

QUESTIONS:	<p>1) Explain Big O, theta, and Big Omega Notation</p> <p>2) Give applications of Linked List</p> <p>3) Explain different operations on Queue</p> <p>4) What are basic operations performed using Heap</p> <p>5) Write short notes on B-Tree</p>
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SUBJECT : Computer Networks

ASSIGNMENT TO BE SUBMITTED TO : Mr. Divyesh

QUESTIONS:

- 1) Draw Diagram of OSI Layers
- 2) Explain Function of physical layer
- 3) Explain TCP/IP with ~~packet~~ layers
- 4) Explain IPV6 Packet Format
- 5) Explain Co-axial cable with diagram.

SUBJECT : Database Management

ASSIGNMENT TO BE SUBMITTED TO : Ms. Shweta

QUESTIONS:

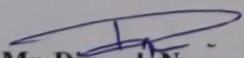
- 1) Explain Normalization in brief.
- 2) Explain DDL statements.
- 3) What is relational model? Explain in brief.
- 4) Explain conflict serializability with example.
- 5) Explain triggers with example.

SUBJECT : Applied Mathematics

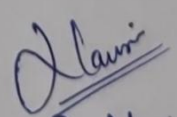
ASSIGNMENT TO BE SUBMITTED TO : Mr. Divyesh

QUESTIONS:

- 1) Show that $A = \begin{bmatrix} 2 & 3+4i \\ 3-4i & 5 \end{bmatrix}$ is Hermitian
- 2) Find Rank $\begin{bmatrix} 1 & 1 & 1 \\ 3 & 1 & 1 \end{bmatrix}$
- 3) Find principal value of $\log [2+3i]$
- 4) Solve $z^2 + z^{-2} = i$
- 5) Find $\tan^{-1} x$, if $\sin^{-1} x - \cos^{-1} x = 5$


Mr. Divyesh Nagrecha
Exam In-charge (Faculty of Science)




Dr. Nansin Mistry