M.Sc. (CS) - I Sem. (with PRAMOTED/ATKT)		
Code	**Subject/Paper**	**List of assignment topic (all Compulsory)**
MCS-101/P1	**Discrete Mathematical Structure**	• Define a partial order relation a Boolean algebra (B, +;)and given example. • Write the incidence matrix the graph. • Draw and Euler graph with example.

MCS- 102/P2	**Computer Organization and Assembly Language Programming**	1) What is K-map? Solved given below-
		   i) $F(P,Q,R,S)=\sum(0,2,5,7,8,10,13,15)$
		   ii) $F(A,B,C,D)=m(3,5,7,8,10,11,12,13)$
		2) What is memory? Explain Memory Organization.
		3) What is microprocessor explain 8086/88.

MCS-103/P3	**Data Structure Using C**	1.What derived data type? Explain. 2. Create user define function to find leap year? 3. What is stack? Write stack operation.

MCS-104/P4	**Data Base Management System (DBMS)**	1. Discuss about indexing and hashing. Write the role of B tree and B^+-tree index in database.
		2. Explain different types of join operation with example. Discuss in brief about relational algebra.
		
		3. Write notes in brief about as-
		   (i) Concurrency control
		   (ii) Recovery techniques
		   (iii) Domain and Tuple calculus

MCS-105/P5	**Numerical Analysis & statistical method**	**1.** Apply LANGRANGES formula to find f(5)given that f(1)=2,f(2)=4,f(3)=8,f(4)=16,f(7)=128 also explain why the result is different form2^5 **2.** Find real root of the equation x^3-3x-6=0 by the method of Regular false position Method corrects the three decimal places. **3**. Solve the following equation x^4-x-12=0 by using Bisection method correct to 3 decimal places.

Practical (For Practical file):

MCS-106/PR-I	**MCS-102/ MCS-104**	• Write any six program DBMS with syntax
MCS-107PR-II	**MCS-103/MCS-105**	• Write any ten program in C with syntax
MCS-208	Application Project (50)	**Create a simple application project of any topic**

	M.Sc. (CS) - III Sem. (with PRAMOTED/ATKT)	
Code	**Subject/Paper**	**List of Questions (all Compulsory)**
MCS-301/P1	**Operating System**	• Explain Overview of Process Management, Memory Management, File Management, Device Management. • Explain operating system services and various types of operating systems. • Explain following i.)File system origination ii) Page segmentation iii) Deadlock prevention iv) PCB
MCS- 302/P2	**Computer Graphics and Multimedia**	• With suitable diagram describe the architecture of a raster-graphics system with a display process. • Explain the steps involved in the design of animation sequence. • Explain the wailer Atherton polygon clipping.
MCS-303/P3	**Java Programming**	1. What is Array? Explain. 2. What is thread priority? How is it assigned? 3. How to create contractor? Explain with example.

MCS-304/P4	**Theory Of Computation**	1) Convert the following CFG TO CNF.{$S \rightarrow ABA$, $A \rightarrow Aa\|\mathcal{E}$, $B \rightarrow Bb\|\mathcal{E}$}
		2) Convert the given CFG TO GNF.
		  a) {$S \rightarrow CA$, $A \rightarrow a$, $C \rightarrow bB\|b$}
		  b) {$A_1 \rightarrow A_2A_3$, $A_2 \rightarrow A_3A_1\|b$, $A_3 \rightarrow A_1A_2\|a$}
		3) Design a PDA Accepting a language L={$a^n b^n \| n >= 1$}.

MCS-305/P5	**Advanced computer Architecture & parallel processing**	1. Explain about Berkley RISCI system. 2. Explain about linear pipelining with diagram. 3. Explain about SIMD Array processor.
Practical (For Practical file):		
MCS-306/PR-I	**MCS-302**	• Write any five program in computer graphics
MCS-307PR-II	**MCS-303**	• Write any ten suitable program in Java programming
MCS-208	Application Project (50)	**Create a simple application project of any topic**