

Teaching Plan
Academic Year 2015-2016

Class : BCS **Semester: I**
Subject : Computer Fundamentals **Paper No: CS301T**
Periods per week : Th 3 **Test (Date):**_____
Weeks (Total) : 15 **Tutorials (Date):**_____

Weeks	Topics to be covered
1	Introduction. Characteristics & features of Computers, Components of Computers.
2	Organization of Computer. Algorithm and Flowcharts Algorithm Definition
3	Characteristics Advantages and Disadvantages Examples Flowchart
4	Definition Define symbols of flowchart Advantages and disadvantages Examples
5	Computer Generation & Classification Generation of Computers : First to Fifth Classification of Computers Distributed & Parallel computers
6	Types of Programming Languages Machine Languages Assembly Languages High Level Languages
7	Assembler, Linker, Loader, Interpreter & Compiler (TEST)
8	Memory Cell & Organization 2/4 Types of Memory (Primary And Secondary) RAM ROM PROM EPROM
9	Secondary Storage Devices (FD, CD, HD, Pen drive, DVD, Tape Drive, DAT)
10	I/O Devices

	Input Devices : Touch screen , OMR, OBR , OCR, Light pen , Scanners
11	Output Devices : o Digitizers, Plotters, LCD o Plasma Display, Printers
12	Processor Structure of Instruction Description of Processor Processor Features RISC & CISC
13	Why Operating System Functions of Operating System Types of Operating System Batch O.S. Multiprogramming O.S. Time
14	Sharing O.S Personal Computers O.S. Network O.S.
15	Revision

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H.O.D.'s

Teaching Plan
Academic Year 2015-2016

Class: BCS I

Semester: IST

Subject: Programming in C

Paper No:304AT

Periods per week: Th3 Practical: 4

Test (Date):

Weeks (Total) : 15

Tutorial (Date):

Week	Topic to be Covered
1	UNIT – II.Introduction
	An Overview of C , History of Clanguage,
	C as a Structured Language, Features of C.
2	2 Basic Elements & Operator Character set, C Token,
	Identifier &Keywords, Variables
	Constant and its types. Integer constantfloating point constant, character constant,string Constants
3	Operators: Arithmetic, Relational, Logical,Unary operators
	Increment & decrement,Assignment and Conditional operator.
	Precedence & Associativity of Operators
4	3.Data Types:Data Types: int, char, float, double.
	Declaration & Initialization.Type modifier: long, short, signed & unsigned
	Test I, Assignment I
5	UNIT – II 4.C Program & I/O statement Structure of C Program,
	Compilation & Execution of C program
	Examples of simple programs
6	I/O: Introduction, Formatted Input/Outputfunction: scanf & printf
	Escape sequence characters.
	Sample programs of sequence structure
7	Library functions: General & Maths.
	Mathematical functions

	Mathematical functions
8	5 Control and Iterative Statements :Simple if, if-else, syntax, explanation
	Sample programs of if, if else.
	nested if, else if ladder syntax, explanation
9	Switch-case statement: syntax, explanation
	Sample programs of Switch-case
	The conditional expression (? : operator) Sample programs of (? : operator)
10	Introduction of looping:Types of loop: entry controlled and exit controlled
	while syntax, explanation
	Sample programs
11	do-while loop, syntax, explanation Sample programs
	for loop syntax, explanation,
	Sample programs of looping
12	UNIT – II6.Arrays: Introduction, Declaration and initializationAccessing array elements,
	Memory representation of array.
	Sample program Arrays
13	One dimension Arrays Sample program
	multidimensionalarrays, Sample program
	Sample program Arrays
14	character array, syntax, explanation,sample program.
	Introduction to string.
	Multiple choice questions
15	Revision
	Test II

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Teaching Plan Academic Year 2015-2016

Class : BCS Semester: I Sem
Subject : Communication Skill Paper No:CS305ATP
Periods per week : Th. __03__ Test (Date): _____
Weeks (Total) : 15 Tutorial (Date): _____

Week	Topic to be Covered
1	Communication Aspects.
2	Uses of Communication Skill.
3	Types of Communication Skill.
4	Test to be conducted
5	Barriers in communication.
6	Johari Window
7	Test to be conducted
8	Listening skill.
9	Types of listening skill.
10	Barriers in listening.
11	Test to be conducted.
12	Seminar.
13	Body language.
14	Revision
15	Practical – Submission of Assignment

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Teaching Plan

Academic Year 2015-2016

Class : BCS **Semester:** III
Subject : DIGITAL ELECTRONICS **Paper No:**cs302-T
Periods per week : Th. 3 Pract. _____ **Test (Date):** _____
Weeks (Total) : 15 **Tutorial (Date):** _____

Week	Topic to be Covered
1	Number Systems and Arithmetic .Decimal Number System & Binary Number System
2	Decimal to Binary conversion(Double-dabble method only).Binary toDecimalConversion.Binary Arithmetic : Binary addition, subtraction,multiplication & division
3	Hexadecimal number system , Hexadecimal to binary,binary to Hexadecimal, Hexadecimal to decimal conversion
4	Hexadecimal arithmetic: Addition, subtraction, multiplication & division Binary subtraction using 1' complement, 2's complement method
5	Boolean Algebra and Logic Gates. Postulates of Boolean Algebra Theorems of Boolean Algebra: Complementation ,commutative
6	AND, OR,Associative,Distributive,Absorption laws , De morgan's theorems Reducing Boolean expressions
7	Logic Gates : AND, OR, NOT, Ex-OR, Ex-NOR NAND as Universal building block Logic diagrams of Boolean expressions Boolean expressions for logic diagrams test and tutorial

8	Minimization Techniques. Introduction , Minterms and Maxterms K-Map, K-map for 2 variables K-map for 3 variables K-map for 4 variables
9	Combinational and Arithmetic Logic Circuits Half Adder & Full Adder Binary parallel Adder Half Subtractor
10	Full Subtractor Adder/Subtractor in 2's complement system BCD to Decimal decoder
11	2 : 4 demultiplexer 4 line to 1 line multiplexer, Flip Flops .Introduction : RS FF
12	Clocked RS FF, D FF.Triggering, preset and clear JK FF , T FF , Race around condition.Master slave FF
13	Counters Introduction : Asynchronous/ ripple counter.Modulus Counter , MOD-12 counter.
14	Synchronous serial & synch.parallel counter BCD counter.Ring counter.Johnson counter 7..
15	Buffer register Serial- in serial -out Serial-in parallel-out.Parallel-in serial-out, parallel-in paralle-out,Test and Tutorial.

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Teaching Plan Academic Year 2015-2016

Class : BCS I Year

Semester: I

Subject : Mathematical foundations

Paper No: CS106-T

Periods per week : Th. 3_____

Test (Date):_____

Weeks (Total) : 15

Tutorial (Date):_____

Week	Topic to be Covered
1	Set Theory-basic definition
2	Operation on Set
3	Principal of Inclusion and Exclusion (PI&E)- problems on (PI&E)
4	Algebraic properties of Set- Commutative Law, Associative Law, Idempotent Law, Distributive Law, Duality
5	Permutations, Permutations for repeated and non repeated cases
6	Combination numerical and word problems
7	Combined problems on P & C, Pigeonhole principal
8	Probability basic concepts
9	Probability numeric problems
10	Relations and Function-Binary relations, Tabular form, Graphical form, Ternary relations
11	Quaternary relation, reflexive relation, symmetric relation, anti-symmetric relation, Transitive relation
12	Equivalence relation, POSET
13	Function-Types of Functions
14	Boolean Algebra-Boolean function, disjunctive normal form and simplification

15	Reserved
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Teaching Plan Academic Year 2015-2016

Class : B.C.S **Semester:** I Sem
Subject : Microprocessor-I **Paper No:** CS103-T
Periods per week : Th_03 Practical: _02_ **Test (Date):**_____
Weeks (Total) : 15 **Tutorial (Date):**_____

Week	Topic to be Covered
1	Historical background
	Microprocessor based personal computer system
	Computer data formats
2	Microcomputer structure
	Microcomputer operations
	8086 internal architecture ,
3	Registers In 8086
	Addressing Modes
	Real Mode Memory Addressing
4	Protected Mode Memory Addressing
	Memory Paging.
	Introduction to programming 8086 : Prog.lang.
5	Example of programming 8086
	Addressing Modes
	Data addressing modes
6	Program memory addressing modes
	Stack memory addressing modes
	Data Movement Instructions
7	Mov Instruction
	Machine language
	the op-code, MOD field
8	Resister assignment
	R/M memory addressing
	special addr.mode
9	Stack instruction
	PUSH instruction of stack
	POP instruction of stack
10	Initializing stack.
	Miscellaneous data transfer instructions
	XCHG instructions

11	LAHF & SAHF
	Multiplication and division
	Arithmetic instructions
12	Addition instructions
	subtraction instructions
	comparison instructions
13	BCD arithmetic
	ASCII arithmetic
14	Revision
15	Revision, class test, tutorial

Teacher's Signature
(Mrs.Ruheena Quadri)

H.O.D.'s Signature
(Dr. S. Javed Kabeer)

Teaching Plan Academic Year 2015-2016

Class : BSc(CS) **Semester:** IInd Sem
Subject : Microprocessor-II **Paper No:** CS303BT
Periods per week : Th_03 Practical: _02_ **Test (Date):** _____
Weeks (Total) : 15 **Tutorial (Date):** _____

Week	Topic to be Covered
1	8086 Microprocessor: Logic instructions
	Basic logic Instructions
	AND, OR, Exclusive-OR
2	NOT, NEG
	Shift and rotate
	Program control Instructions
3	The JUMP group Instruction: Conditional
	The JUMP group Instruction: Un-Conditional
	Procedures - CALL & RET
4	Controlling the Flow of an Assembly Language Program
	Loops - WHILE,
	REPEAT UNTIL
5	Machine Control & Miscellaneous Instruction :
	WAIT, NOP, HALT, LOCK, ESC,
	ENTER, BOUND, LEAVE
6	UNIT - II. Programming the Microprocessor
	String Procedure & Macros
7	Modular Programming – Assembler & linkers. class test, tutorial
8	Instructions – AAA, AAD, AAM, AAS, ADC, ADD, SUB, MOV, DAA, DEC, DIV, ESC, HALT, INT, INC, INTO, JNZ, JZ, JMP, LOOP, LOOPZ, MUL, MOVS, POP, PUSH, RET, ROR, SBB, WAIT, XCHG.
9	UNIT – III Interrupts
	Basic Interrupt Processing
10	Hardware Interrupts,
	8259 A Programmable interrupt Controller,
11	Interrupt Examples.
	DMA & DMA Control I/O
12	Basic DMA Operation
	8237 DMA Controller
13	Shared Bus Operation,
	Disk Memory Systems,
	Video Displays.
14	Revision
15	Revision, class test, tutorial

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