

Department of Computer Science (H.E.S), Government College, Ropar

(2019-20)

Class BCA Sem. 1st Subject Programming in C- Language

Time Period	Topics to be Covered
Week 1	Programming Process: Problem definition, Algorithm development, Flowchart, Coding, Compilation and debugging.
Week 2	Basic structure of C program: History of C, Structure of a C program, Character set, Identifiers and keywords, constants, variables, data types.
Week 3	Control statements: branching statements (if, if else, switch), loop statements (for, while and do-while), jump statements (break, continue, goto), nested control structures.
Week 4	Functions: Library functions and user defined functions, prototype, definition and call, formal and actual arguments, local and global variables, methods of parameter passing to functions, recursion. I/O functions: formatted & unformatted console I/O functions
Week 5	Storage Classes: automatic, external, static and register variables.
Week 6	Arrays: – One dimensional and two dimensional arrays
Week 7	Declaration, initialization, reading values into an array, displaying array contents Strings: input/output of strings, string handling functions (strlen, strcpy, strcmp, strcat & strrev), table of strings.
Week 8	MST (Mid-Semester Test)
Week 9	MST (Mid-Semester Test)
Week 10	Structures and unions: using structures and unions, comparison of structure with arrays and union.
Week 11	Pointers: pointer data type, pointer declaration, initialization, accessing values using pointers,
Week 12	pointers and arrays.
Week 13	revision
Week 14	Introduction to Files in C: opening and closing files.
Week 15	Basic I/O operation on files.
Week 16	Queries from students

Teacher's Signature

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16/7/2019

Govt. College, Ropar
Computer Department (HEIS)

Class B.C.A Sem. 1

(Session 2019-2020)

Week	Lesson scheduled
1 st	ਪੰਜਾਬੀ ਧੁਨੀ ਵਿਉਂਤ ਸਵਰ, ਵਿਅੰਜਨ ਧੁਨੀਆਂ ਦਾ ਵਰਗੀਕਰਨ
2 nd	ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਤੇ ਗੁਰਮੁਖੀ ਲਿਪੀ ਦਾ ਰਿਸ਼ਤਾ, ਸ਼ਬਦ ਜੋੜਾਂ ਦੇ ਨਿਯਮ
3 rd	ਨਿਬੰਧ ਰਚਨਾ
4 th	ਬਤਖ ਦੇ ਖੰਭਾ ਜਿਹੇ ਸਫੇਦ ਦਿਨ, ਨਾਵਲ ਪੜ੍ਹਾਉਣਾ
5 th	ਬਤਖ ਦੇ ਖੰਭਾ ਜਿਹੇ ਸਫੇਦ ਦਿਨ, ਨਾਵਲ ਪੜ੍ਹਾਉਣਾ
6 th	ਬਤਖ ਦੇ ਖੰਭਾ ਜਿਹੇ ਸਫੇਦ ਦਿਨ, ਨਾਵਲ ਪੜ੍ਹਾਉਣਾ
7 th	ਬਤਖ ਦੇ ਖੰਭਾ ਜਿਹੇ ਸਫੇਦ ਦਿਨ, ਨਾਵਲ ਪੜ੍ਹਾਉਣਾ
8 th	➤ MST
9 th	➤ MST
10 th	ਬਤਖ ਦੇ ਖੰਭਾ ਜਿਹੇ ਸਫੇਦ ਦਿਨ, ਨਾਵਲ ਪੜ੍ਹਾਉਣਾ
11 th	ਵਿਸ਼ਾ, ਸਾਰ, ਪਾਤਰ ਚਿਤਰਨ, ਛੋਟੇ ਉੱਤਰਾਂ ਵਾਲੇ ਪ੍ਰਸ਼ਨ
12 th	ਨਾਂਵ, ਪੜਨਾਂਵ
13 th	ਵਿਸ਼ੇਸ਼ਣ, ਕਿਰਿਆ ਵਿਸ਼ੇਸ਼ਣ
14 th	ਸੰਬੰਧਕ, ਯੋਜਕ
15 th	ਦੁਹਰਾਈ।
16 th	ਦੁਹਰਾਈ।

Gurpreet Kaur
Teacher

H.O.D
11/07/2019

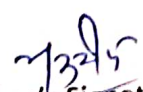
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Department of Computer Science (IIEIS), Government College. Ropar

(2019-20)

Class : BCA Sem. 2nd Subject :- Data Structure

Time Period	Topics to be Covered
Week 1	Basic concepts and notations: Types of data structures, Data structure operations,
Week 2	Mathematical notations and functions complexity
Week 3	Big 'O' notation, Time and space trade off.
Week 4	Arrays: Linear array, representation of array in memory, traversing linear array, insertion and deletion in an array, Two-dimensional array, row major and column major orders, sparse matrix.
Week 5	Stacks: Representation of stacks in memory (linked and sequential), operations on stacks, Applications of stacks: string reversal, parentheses matching.
Week 6	Queues: Representation of queues in memory (linked and sequential), operations on queues, insertion in rear, deletion from front.
Week 7	Linked list: Representation of linked list using static and dynamic data structures,
Week 8	MST
Week 9	MST
Week 10	insertion and deletion of a node from linked list,
Week 11	searching in link list, searching in sorted link list.
Week 12	Trees: Definition and basic concepts, linked representation and representation in contiguous storage, binary tree
Week 13	binary tree traversal, Binary search tree, searching, insertion and deletion in binary search tree.
Week 14	Searching and sorting algorithms: Linear and binary search, bubble sort, insertion sort,
Week 15	selection sort, quick sort, merge sort.
Week 16	Queries from students

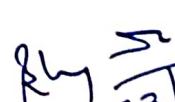

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LESSON PLAN	
BCA- Sem-II	
Subject- Digital Electronics	
January 2020 to April 2020	
Month	Topic
January (Month-1)	WEEK-4: Fundamental Concepts: Introduction to Analog and Digital Systems, Digital Signals, Basic Digital Circuits: AND, OR, NOT, NAND, NOR, XOR and XNOR gates. Boolean algebra theorems
February (Month-2)	WEEK-1: Characteristics of Digital IC. Number Systems: Positional and Non-positional number systems, Binary, Decimal
	WEEK-2: Octal and Hexadecimal Base conversions, Binary arithmetic: Addition and Subtraction, 1's complement, 2's complement
	WEEK-3: subtraction using 1's complement and 2's complement. Combinational Logic Design: SOP and POS Representation of Logic functions,
	WEEK-4: K-Map representation and simplification up to 4 variable expressions, Don't care condition.
March (Month-3)	WEEK-1: Multiplexers: 4X1, 8X1 and 16X1. De-multiplexers: 1 to 4, 1 to 8 and 1 to 16. BCD to Decimal decoder, Decimal to BCD encoder.
	WEEK-2: Parity generator and Parity checker. Design of Half adder and Full adder, Flip-Flops: Introduction, Latch, Clocked S-R Flip Flop
	WEEK-3: Preset and Clear signals, D-Flip Flop, J-K Flip Flop, The race-around condition
	WEEK-4: - MST
April (Month-4)	WEEK-1: -Master Slave J-K Flip Flop, D-Flip-Flop, Excitation Tables of Flip Flops. Edge-Triggered Flip Flops. A/D and D/A Converters: Introduction, Digital to Analog Converters: Weighted-Register D/A converter
	WEEK-2: R-2R Ladder D/A converter. Analog to Digital Converters: Quantization and encoding, Parallel-comparator A/D converter, Counting A/D converter.


Manpreet Singh


23/12/2019
HOD

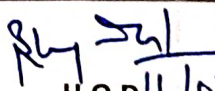

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Govt. College, Ropar
Computer Department (HEIS)
 Class B.C.A Sem. II
 (Session 2019-2020)

Week	Lesson scheduled
1 st	ਵਪਾਰਕ ਪੱਤਰ
2 nd	ਸ਼ਬਦ ਬਣਤਰ ਤੇ ਸ਼ਬਦ ਰਚਨਾ
3 rd	ਸ਼ਬਦ ਰਚਨਾ ਪਰਿਭਾਸ਼ਾ ਮੁੱਢਲੇ ਸੰਕਲਪ
4 th	ਚੋਣਵੇਂ ਪੰਜਾਬੀ ਨਿਬੰਧ (1,2) ਨਿਬੰਧ
5 th	ਚੋਣਵੇਂ ਪੰਜਾਬੀ ਨਿਬੰਧ (3,4) ਨਿਬੰਧ
6 th	ਚੋਣਵੇਂ ਪੰਜਾਬੀ ਨਿਬੰਧ (5,6) ਨਿਬੰਧ
7 th	ਚੋਣਵੇਂ ਪੰਜਾਬੀ ਨਿਬੰਧ (7,8) ਨਿਬੰਧ
8 th	➤ MST
9 th	➤ MST
10 th	ਚੋਣਵੇਂ ਪੰਜਾਬੀ ਨਿਬੰਧ (9, 10) ਨਿਬੰਧ
11 th	ਚੋਣਵੇਂ ਪੰਜਾਬੀ ਨਿਬੰਧ (11, 12) ਨਿਬੰਧ
12 th	ਚੋਣਵੇਂ ਪੰਜਾਬੀ ਨਿਬੰਧ (13, 14) ਨਿਬੰਧ
13 th	ਚੋਣਵੇਂ ਪੰਜਾਬੀ ਨਿਬੰਧ (15) ਨਿਬੰਧ
14 th	ਭਾਸ਼ਾ ਅਤੇ ਉਪਭਾਸ਼ਾ ਅੰਤਰ ਸਬੰਧ
15 th	ਦੁਹਰਾਈ।
16 th	ਦੁਹਰਾਈ।

Gurpreet Kaur
 Teacher


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 H.O.D/1/07/2019