## **Hour-wise Plan**

## **UNIT II**

Hour	Торіс	Reference Books	Teaching Mode
1	Functions: Introduction, standard library functions, need for user defined functions, The form of C functions with an example	T1, R1, R2	Black Board
2	Functions: Category of functions with examples; Nested functions	T1, R1, R2	Black Board
3	Functions: The scope and lifetime of variables in functions: storage classes with examples	T1, R1,R2	Black Board and LCD Projector
4	Functions: Recursion	T1, R1, R2	Black Board
5	Formative Assessment #3		
6	Arrays: Definition, Accessing, One and Two dimensional arrays	T1, R1, R2	Black Board and LCD Projector
7	Arrays: Searching-Linear and Binary Search	T2, R1	Black Board
8	Arrays: Sorting-Bubble Sort-Time Complexity	T2, R1	LCD Projector - Animations
9	Arrays: Insertion Sort, Selection Sort	T2, R1	LCD Projector - Animations
10	Arrays: Merge Sort	T2, R1	LCD Projector - Animations
11	Arrays: Quick Sort	T2, R1	LCD Projector - Animations
12	Formative Assessment #4		
13	Pointers: Pointer Fundamentals-Declaration of pointers	LR6	Black Board
14	Pointers: Pointer arithmetic, pointers with functions	LR6	Black Board and LCD Projector
15	Pointers: Pointers and arrays, Pointers and strings	LR6	Black Board
16	Pointers: Dynamic memory allocation	LR6	LCD Projector
17	Formative Assessment #5		

Assignment Questions: (1) Compare and contrast iterative functions and recursive functions

<sup>(2)</sup> Write and explain how a 3D array can be used to store and process sales of a product

<sup>(3)</sup> What are the advantages and disadvantages of using pointers? List out the languages that use pointers and that do not use pointers.