

## Mid-terminal syllabus

1. **Number system and Codes:** Positional & non positional number systems, Binary, Octal, Hexadecimal number system and Conversion, Representation of negative numbers & real numbers, Fixed and floating point numbers. Characteristics codes (ASCII, EBCDIC etc.) and others like Grey, Excess-3 etc.
2. **Arithmetic:** Signed 2's complement/1's complement arithmetic, subtraction using addition, Repetitive addition and subtraction to accomplish multiplication & division etc.
3. **Introduction to Programming in C:**  
Idea of High level, Assembly level & M/c level language.  
Interpretation and compilation.  
Variables and data types (basic), simple programs, assignment, decision, loops, scope: Global & local, operators, control structure (if, if-else, switch, for, while, do while, break and continue)  
Structural data type (Array)