المفردات	المادة	المرحلة
1-Numbers SYSTEMS-decimal Number-Binary Number-Octal Number-Hexadecimal Number/2-Coversions Between system/decimal to Binary Conversion/binary to-decimal Conversion decimal to Octal Conversion/1-Octal to decimal Conversion/-Binary to Hexadecimal Conversion/-Octal d to Binary Conversion/-Binary to Hexadecimal Conversion/-Octal d to Binary Conversion/-Octal d to Hexadecimal Conversion/-Arithmetic Operations-Addition in Binary-Addition in octal-Addition in Hexadecimal/-Complements/1's ComplementsInBinary-2's Complements In Binary/ 1 s and 2 s Complements in decimal/I s and 2 s Complements in Octal/ 1 s and 2's Complements in Hexadecimal/Subtraction in Binary/ Multiplication in Binary/- Division in Binary// Signed Number/2-1 Binary coded decimal(BCD)/2-2 Encess 3/ The Gray cod/ Parity binary number/- odd-parity/ even- Parity//3- Boolean Algebra/3-1 Boolean Operation/3-2 Rules and laws of Boolean algebra/3-3 Standard Representation for Logical/ The SOP and the POS/ variable the Karnaugh 3-4 The Karnaugh Map/ Two-variable the Karnaugh Map/ Three-variable the Karnaugh Map/ Trevarible the Karnaugh Map/ Simplification Karnaugh Map/dont care condition/Design Examples/3-5-1 Half-adder/Full adder/Half subtractor/Full Subtractor/BCDTO7-SEGENTDECODER/Convert cray to binary/Convert binary to cray/3-5-8 Parallel adder circuit//4-Flip-Flops/4-1 Flip-Flops R-S/4-2 Flip-FlopsR-S latch/4-3D-type flip-flop/4-4 J-K-flip Flops/4-1 Flip-Flops R-S/4-2 Flip-FlopsR-S latch/4-3D-type flip-flop/4-4 J-K-flip Flops/4-5 TOGGLE FF(T_FF)// 5- encoder and Decoder/6- Multiplexers and their use in combinational logic design/7-Read Only Memory (ROM)//8-Counters/8-1 parallel counter/8-2 Other counter//9- Shift Registers/9-1 Interoduction/9-2 Serial Shift Registers/9-3 Parallel Shift Registers	التصميم المنطقي الحاسبات logic design	الاولى