**In order to achieve the assessment criteria (M1.2) you must answer the following task:**

**Task 1**

1. F( A , B , C ) $=$ A'B'C' $+$ AB $+ $A'BC'
2. F( A , B , C ) $=$ A'BC $+$ AB'C' $+$ A'B'C' $+$ AB'C $+$ ABC
3. F( A , B , C , D )$ =$ ABC $+$ CD $+$ BC'D $+$ B'C
4. F( A , B , C , D )$ =$ A'BCD+AB'C'+A'B'C'+B'CD+ABCD
5. F( A , B , C , D )$ =$ A'B'C'D'+ABD+A'BC'D'+A'BCD

**(M1.2)**

**In order to achieve the assessment criteria (M3.3) you must answer the following task:**

**Task 2**

Prepare a presentation to compare between the basic IC Logic families, include the reference used in your comparison.

**(M3.3)**

**In order to achieve the assessment criteria (D1.2) you must answer the following task:**

**Task 3**

1. Design (4 to 16) binary decoder.
2. Verify your design using Simulation program.

**(D1.2)**