

3. Explain the operation of the bit test instructions (BT, BTR, BTS, BTC)

4. Explain the operation of the bit scan instructions (BSF, BSR).

5. **Example:** Given the following initial state, list all changed registers and/or memory locations and their new values. Where appropriate, you should also list the state of the carry flag (CF).

Initial state:

EAX: 0x00000000
EBX: 0x0000000A
ECX: 0x00000000
EDX: 0x00000000
CF: 0
ESI: 0x00000008
EDI: 0xFFFF0000

Address

0x21100	04	00	10	10
0x21104	89	01	20	40
0x21108	02	00	00	16
0x2110C	17	03	FF	00
0x21110	1E	00	06	00
0x21114	08	00	0A	00

Instructions:

BT WORD PTR [0x21102], 4
BTC WORD PTR [0x21110], 1
BTS WORD PTR [0x21104], 1
BSF CX, WORD PTR [0x2110E]
BSR DX, WORD PTR [0x21109]