

*Or*

6. (a) Explain the following instructions in 8051 : [6]
- (i) MUL AB
  - (ii) SWAP A
  - (iii) MOV DPTR, #3000H
- (b) List the features of 8051 microcontroller. Draw and explain architecture of 8051. [7]
7. (a) How many interrupts are there in 8051 ? List them according to their priority. Explain the IP register structure. [7]
- (b) Explain any *two* operating modes of timer used in 8051. [7]

*Or*

8. (a) List and classify 8051 interrupts. [7]
- (b) Draw and explain formats of SBUF and IE. [6]