

**Q.2a. Explain the following pins**

- (i) ALE
- (ii) Ready

Answer: I [1(1.1)] page 2, 8

**Q.2b. Explain with the help of an example various flags of 8086.**

Answer: I [1(1.2)] page 17-18

**Q.3a. Explain with the help of an example LDS and LES instructions of 8086**

Answer: I [11(11.1)] page 190-191

**Q.3b. Explain two types of addressing I/O ports in brief with example.**

Answer: I [5(5.3,5.4)] page 66,67

**Q.4a Explain how iterative instructions of 8086 provides a loop in a program.**

Answer: I [9(9.4)] page 151

**Q.4b. Explain with example intra and inter segment CALL instruction.**

Answer: I [10(10.5)] page 179-183

**Q.5a. Explain the status register of 8087.**

Answer: I [12(12.5)] page 220

**Q.5b. Explain any two compare instructions used in 8087 instruction bit.**

Answer: I [13(13.3)] page 242

**Q.6a. Why do we need assembler directives and explain the following assembler directives.**

- (i) .DB
- (ii) ALIGN
- (iii) END

Answer: I [14(14.1)] page 262-263

**Q.6b. Write a program in assembly language to sort in ascending order using bubble sort algorithm.**

Answer: I [15(15.5)] page 287

**Q.7 a. Explain the various methods of accessing IBM PC hardware.**

- (i) using BIOS services
- (ii) using DOS services

Answer: I [16(16.2)] page 292

**Q.7b Write an 8086 assembly language to compute  $nCr$ , given  $n$  and  $r$ , using recursion. Display result using DEBUG.**

Answer: I [16(16.3)] page 293

**Q.8a. Explain the pipeline organisation of Pentium processors.**

**Answer:** II [11(11.3)] page 544

**Q.8b. Write and explain the flag register of 80386.**

**Answer:** II [10(10.3)] page 510

**Q.8c. Explain with the help of example the various addressing modes of 80386 processor.**

**Answer:** II [10(10.4)] page 512

**Q.9a. Write a C program to create a subdirectory if it does not exist, using DOS interrupt. A suitable message should be displayed on CRT depending on the success or failure of the program.**

**Answer:** I [21(21.2)] page 365

**Q.9b. Write a C program to read a string from keyboard with DOS interrupt and print the same on the printer, if it is on line. Display a suitable message on the screen if the printer is off.**

**Answer:** I [21(21.6)] page 372.

### **Text Books**

- I) Advanced Microprocessor & IBM-PC Assembly solving programming, K Udaya Kumar & B S Umashankar, TMH,1996
- II) Advanved Microprocessors & Peripherals, A K Ray & K M Burchandi, TMH, 2000