**Question Bank**

 **S.Y.B.Sc. (Comp.Sci.) Electronic Science**

**Paper –I Microprocessor Architecture & Programming**

**By : Mr. S.P.Mahajan**

**Chapter 1**

1) What do mean by hit ratio of a cache memory. 1 Marks

2) Give application of USB. 1 Marks

3) State any two advantages of serial port communication. 1 Marks

4) Define the term virtual memory. 1 Marks

5) State any two features of Pentium-4 microprocessor 1 Marks

1) Explain register organization with proper diagram. 5 Marks

2) Explain how the logical address converts into physical address in case of segmentation. 5 Marks

3) Explain the DMA transfer in Pentium. 5 Marks

4) Explain associative mapping process for cache memory. 5 Marks

5) Write the short note on PCI Bus & PCMCIA Bus. 5 Marks

**Chapter 2**

1)Explain different registers in Pentium. 5 Marks

2) Difference between real mode & protected mode. 2 Marks

3)Draw & explain Pentium architecture. 5 Marks

4) What is the role of floating point unit in Pentium architecture. 5 Marks

5) Explain the role of Flag register in Pentium. 5 Marks

6) state the important features of Pentium. 1 Marks

7)Draw the software model of Pentium. 1 Marks

8) If CS=2000H & Offset=2FFH what is effective address. 1 Marks

9) What is Interface Circuit ?

10) Show the format of segment descriptor. How is physical address obtained using segment descriptor ?

**Chapter 3**

1)Which instruction is used to find 2’s complement of a number. 1 Marks

2) What will be the output of 5 Marks

MOV AL,27H

MOV BL, 37H

ADD AL,BL

DAA

3) Difference between mask-able & non mask-able interrupt. 5 Marks

4) What are instruction is used to set bit 1,2, 3 & 5 AL. 5 Marks

5) What is the difference between 1 Marks

MOV AL, 00 & XOR AL, AL

6) Explain the classification of Pentium instructions. 5 Marks

7) Explain in detail LDS instructions. 5 Marks

8) Explain any five addressing mode with example. 5 Marks

9) If AL= 50H & BL,A5H 5 Marks

What is the result of 5 Marks

1)AND AL,**BL**

2)OR AL,BL

3)XOR AL,BL

10) What is an interrupt ? Explain Interrupt vector Table. 5 Marks

11)Explain the process of servicing multiple interrupts. 5 Marks

12)Write short note on DOS interrupt 21h. 5 Marks

**Chapter 4**

1)Which DOS function is used to terminate the program. 1 Marks

2)State the various software drivers used in computer. 1 Marks

3)Which directive is used to define ten bytes data. 1 Marks

4) Write the assembly language program using Pentium instruction:

a) to search the character in the string 5 Marks

b) to find largest number from an array of five nos. 5 Marks

c) to convert decimal number into the binary. 5 Marks

d) to add two \* bit numbers

e) to arrange 5 nos in ascending order from array

5) Define algorithm & flowchart. 1 Marks

6) State the application of software device drivers. 1 Marks

7) What do you mean by directives. 5 Marks

8) What is NASM? Detail. 5 Marks