Q1: Attempt any four parts:

1. Draw the block diagram of microprocessor and explain it in brief.
2. Explain the physical address formation with the segment and offset words.
3. Discus the improvement of intel 8086 over intel 8085 microprecessor.
4. Describe the function of the 8086 queue. How does the queue speed up processing.
5. Discuss the features of 8085 interrupts. Also explain the SIM and RIM formats.
6. Describe memory segmentation? How can it generate the physical address, explain with example.

Q2: Attempt any four parts:

1. Draw the architecture of 8086 microprocessor and explain it in brief.
2. Discuss various types of addressing modes of Intel 8085 with suitable examples.
3. Explain the various data transfer techniques.
4. Draw the pin dia of 8085 microprocessor.
5. explain the minimum mode of operation in 8086 microprocessor.
6. Explain the instruction : SHLD 16-bit addr, DAA, STA 16 bit addr.

Q3: Attempt any two parts:

1. Draw the pin dia. of 8255. What are different operating modes of 8255? Discuss how to determine the control word for 8255. Discuss the BSR mode.
2. Draw and explain the block dia of keyboard display controller (8257).
3. Draw the internal architecture of 8253 and discuss various operating modes of 8253.

Q4: Attempt any two parts:

1. Describe the PCI bus with the help of suitable block diagram. What is the address and data bus width of PCI bus? What is the speed of the PCI bus.
2. Explain various DMA controllers. Write an 8086 assembly program to perform multiplication of two binary numbers.
3. Why is 8251 called a USART? Define the mode word register of 8251.

Q5: Attempt any two parts:

1. What is the difference between dual core and cord to duo? Explain the feature of different available advance microprocessors.
2. Write a short note on Pentium processor.
3. Draw and discuss the internal block diagram of 80486.