16U	634 (Pages: 2)	Name:	
SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2019			
(Regular/Supplementary/Improvement)			
(CUCBCSS-UG)			
CC15U BCS6 E03 - MICROPROCESSOR AND APPLICATIONS Computer Science - Elective			
	(2015 Admission onwards)		
Time:	Three Hours	Maximum: 80 Marks	
	Part A		
Answer <i>all</i> questions. Each question carries 1 mark.			
1.	pin determines the mode selection in 8086	6	
2. The addressing mode supported by the instruction MOV AX, [1000 H] is			
3. 8086 microprocessor has data lines.			
4.	4. 8086 supports a RAM of maximum size		
5.	5 directive is used to indicate the end of a program.		
6.	6. 8086 receives the maskable interrupts through pin.		
7.	8251A is a IC.		
8.	register in 8259 A indicates the interrupts	under service.	
9.	80486 supports virtual memory of size		
10. Expand BIOS			
		$(10 \times 1 = 10 \text{ Marks})$	
Part B			
Answer <i>all</i> questions. Each question carries 2 marks.			
11. Find the physical address of the next instruction to be executed when CS=1002H,			
	DS=2011H, IP=1023H, BP=2022H		
12. Differentiate memory mapped IO and IO mapped IO.			
13. What is interrupt vector table?			
14. Explain the role of 8255 in interfacing.			
15.	. What are TLBs?		
$(5 \times 2 = 10 \text{ Marks})$			
Part C			
Answer any <i>five</i> questions. Each question carries 4 marks.			
16. Write an assembly language program to search a number in a list given.			
17. What is an Instruction Queue?			

18. Write note on the following instructions: DAA, ADC

- 19. Explain the purpose of the Pins: ALE, HOLD
- 20. Explain the various Segment registers supported in 80386.
- 21. Give note on BIOS and DOS interrupts.
- 22. Explain the role of DMA controller in bulk data transfer.
- 23. What are macros? How it is different from a procedure?

 $(5 \times 4 = 20 \text{ Marks})$

Part D

Answer any five questions. Each question carries 8 marks.

- 24. Explain the Architecture of 8086 with a neat diagram.
- 25. Describe the Maximum mode configuration of 8086.
- 26. What are the various addressing modes supported by 8086?
- 27. Explain in detail: Interrupt Handling in 8086
- 28. Explain in detail any four categories of Assembly Directives.
- 29. Describe in detail 8253, Programmable Interval Timer
- 30. Explain the Virtual memory configuration in 80486.
- 31. Write note on various Pentium Processors.

 $(5 \times 8 = 40 \text{ Marks})$
