Reg. No. :	SHOTHI COLLEGE
Name :	X KAN 11 OT. X

III Semester B.C.A. Degree (CBCSS - OBE - Regular/Supplementary/
Improvement) Examination, November 2023
(2019 to 2022 Admissions)
Core Course

3B06BCA: INTRODUCTION TO MICROPROCESSORS

Time: 3 Hours Max. Marks: 40

PART – A (Short Answer)

Answer all questions.

 $(6\times1=6)$

- 1. What do you mean by microprocessor?
- 2. Mention various flags in 8085 microprocessor.
- 3. Mention two functional units of 8086 microprocessor.
- 4. What is the use of ISR register in 8259A?
- 5. What is the use of TRAP pin signal?
- 6. What is the purpose of JNZ instruction?

PART – B (Short Essay)

Answer any 6 questions.

(6×2=12)

- 7. Write advantages of microprocessor.
- 8. Write note on string instructions.
- 9. What do you mean by maskable interrupts?
- 10. Write any two shift instructions in 8086.

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K23U 3541 AGE UESX

- 11. What do you mean by interrupts?
- 12. Compare 8085 and 8086 microprocessor. (Mention any 2 properties each)
- 13. Short note on various operation modes of 8255 peripheral interface.
- 14. Write note on minimum and maximum mode of 8086 microprocessor.

PART – C (Essay)

Answer any 4 questions.

 $(4 \times 3 = 12)$

Answer all questions

- 15. Write an assembly language program to add two 16 bit numbers.
- 16. Explain any 6 registers of 8085 microprocessor.
- 17. Explain any 6 arithmetic instructions of 8086.
- 18. Short note on stack structure of 8086.
- 19. Compare programmed I/O and interrupt driven I/O.
- 20. Write note on DMA.

PART – D (Long Essay)

Answer any 2 questions.

(2×5=10)

6. What is the purpose of

Answer any 6 duestions.

What do you mean by microprocessor

3. Mention two functional units of 8082.

4. What is the use of ISR registerin 82594

2. Mention various flags in 8085 m

- 21. Explain with a neat diagram architecture of 8085 microprocessor.
- 22. Explain various data transfer instruction in 8085 microprocessor.
- 23. Explain interrupts and ISR of 8086 microprocessor.
- 24. Explain register organisation of 8086 microprocessor.

What do you mean by maskable interrupts

Write advantages of microproces

10. Write any two shift instructions in 8086.

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K22U 3585

Reg No :	670511	
Reg. No. :	0.5,0	 How does branch instruction differential What is the use of SIM instruction
Third Semester B.C.A. Dec Improvement (201	gree (CBCSS – OB nt) Examination, N 19 Admission Onw Core Course	E – Regular/Supplementary/ ovember 2022
Time: 3 Hours		Max. Marks: 40
THE STATE OF THE S	SECTION - A	15. Differentiate Maskable and Non
Answer all the questions.	ART 4 8888 to no	1((0=1×0) a note on Bus Organization
1. Define Bus.	processors	17a-Compare 8085 with 8086 Micro
2 is a DMA Controll	er chip.	18. Write a note on various data tra
3. The length of 8086 memory	address is	. stid. 19. How does DMA controller work
4. Zero flag is set when		20. Enumerate various flag register
5. Name the register that part	of ALU.	isogos gan caonav castornaria 192
6. The BSA instruction is	SEGTION - D (Long Essay)	
5. Whaths the use of SOL be		
(2×5=10) 6. What is meant by weak en		Answer any 2 questions.
Anower any 6 augotions	oroprocessor.	21. Explain the features of 8086 Mic
7. What are assembler directi		2.(12=12) on the various addressing
8. What are interrupt service in	oture of programmat	28 Explain the features and archite
보다 내가 보통 중요하는 이 가다면 보다는 이 경기를 하지만 하는데 보다를 보는데 되었다면 하는데		A9888 D86 Microprocessor ?
10. Give an account of the follo		 With the help of a near diagram 8255 Microprocessor.
a) MOV C,D		
b) MOV B,D	and in KARCH 2	

K22U 3585



- 11. How does branch instruction differ from loop instruction?
- 12. What is the use of SIM instruction?
- 13. What is memory mapped I/O?
- 14. What is the function of programmable interrupt controller?

SECTION – C (Essay)

Answer any 4 questions.

 $(4 \times 3 = 12)$

- 15. Differentiate Maskable and Non Maskable interrupts.
- 16. Write a note on Bus Organization of 8085.
- 17. Compare 8085 with 8086 Microprocessors.
- 18. Write a note on various data transfer instructions.
- 19. How does DMA controller work?
- 20. Enumerate various flag registers used in 8086.

SECTION – D (Long Essay)

Answer any 2 questions.

 $(2 \times 5 = 10)$

- 21. Explain the features of 8086 Microprocessor.
- 22. Detail on the various addressing modes in 8086 Microprocessor.
- 23. Explain the features and architecture of programmable interrupt controller 8259A.
- 24. With the help of a neat diagram, explain the architecture and features of 8255 Microprocessor.



Reg. No.:....

Name:.....

III Semester B.C.A. Degree CBCSS (OBE) Reg./Sup./Imp. Examination, November 2021

(2019 – 2020 Admission) Core Course : 3B06BCA

INTRODUCTION TO MICROPROCESSORS

Time: 3 Hours

Max. Marks: 40

15. What is the function of Execution U.A. TRAP

(Short Answer)

16. Explain the features of 8257 DMA Controller

Answer all questions.

eldst rotoev toumetat nactor table

- 1. What is immediate addressing mode?
- 2. Explain AX Register.
- 3. What is pipelining?
- 4. What is the use of code segment?
- 5. Define instruction pointer.
- 6. Define stack.

PART - B

102290 (Short Essay) II atea nollourtani auchav aaucaid 15

Answer any 6 questions.

mangsib nig 8888 (6×2=12)

- 7. Differentiate Maskable and Non-Maskable interrupts. To enutoe interrupts and misloged 188
- 8. Explain the features of Microprocessors. a algument to sequit algument mislayed .49
- 9. Explain the bus organization of 8085 microprocessor.
- 10. Explain any two control flags.
- 11. What is the use of segment register?

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- 12. Explain the pin ALE.
- 13. Explain the instruction to transfer the address.
- 14. Explain any two loop instructions.

PART – C
(Essay)

Answer any 4 questions.

 $(4 \times 3 = 12)$

- 15. What is the function of Execution Unit?
- 16. Explain the features of 8257 DMA Controller.
- 17. Explain Interrupt vector table.
- 18. Explain conditional flags.
- 19. Explain bit manipulation instructions.
- 20. Explain DMA controller.

PART – D (Long Essay)

9. Explain the bus organization of 8085 microprocessor

Answer any 2 questions.

 $(2 \times 5 = 10)$

- 21. Discuss various instruction sets in 8086 microprocessor.
- 22. Explain 8086 pin diagram.
- 23. Explain the architecture of 8085 microprocessor with diagram.
- 24. Explain Interrupts, types of interrupts and Interrupt Service Routines.

Reg. No. :

III Semester B.C.A. Degree CBCSS (QBE) – Regular Examination, November 2020 (2019 Admission Only)

Core Course

3B06BCA: INTRODUCTION TO MICROPROCESSORS

Time: 3 Hours

Max. Marks: 40

PART - A

(Short Answer)

Answer all questions:

 $(6 \times 1 = 6)$

- 1. Define Stack.
- 2. Explain Bus Cycle.
- 3. Define bandwidth.
- 4. What is RISC processors?
- 5. Explain instruction register and decoder.
- 6. Explain the use of INTA pin.

PART - B

(Short Essay)

Answer any 6 questions:

 $(6 \times 2 = 12)$

- 7. Explain Interrupts and Interrupt Service Routines.
- 8. Explain the various features of Microprocessors.
- 9. Explain any two flag registers.
- 10. Explain instruction to transfer the address.

- 11. Mention iteration control instructions.
- 12. Explain Assembler directives.
- 13. Explain I/O mapped memory.
- 14. State the uses of flag manipulation instructions.

PART - C (Essay)

Answer any 4 questions:

 $(4 \times 3 = 12)$

- 15. Explain General purpose registers.
- 16. Explain interrupt cycle of 8086.
- 17. Explain Machine Language Instruction format with example.
- 18. Explain addressing modes in 8086.
- 19. Differentiate maskable and non maskable interrupts.
- 20. List the data transfer instruction sets in 8086 microprocessor.

PART – D (Long Essay)

Answer any 2 questions:

 $(2 \times 5 = 10)$

- 21. Explain Pin diagram of 8086 Microprocessor.
- 22. Explain features and architecture of DMA Controller 8257.
- 23. Discuss the Bus Organization of 8085 microprocessor with diagram.
- 24. Explain generations of Microprocessors with suitable examples.