K23U 3541

Reg. No. : ....

Name : ....

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.
(6×1=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.

P.T.O.

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.   (4×3=12)

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)

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.

————————————

K22U 3585

Third Semester B.C.A. Degree (CBCSS – OBE – Regular/Supplementary/ Improvement) Examination, November 2022
(2019 Admission Onwards)
Core Course
3B06BCA : INTRODUCTION TO MICROPROCESSORS

Time : 3 Hours

Max. Marks : 40

SECTION – A

Answer **all** the questions.　　　　　　　　　　　　　　　　　　**(6×1=6)**

1. Define Bus.

2. _____ is a DMA Controller chip.

3. The length of 8086 memory address is _____ bits.

4. Zero flag is set when

5. Name the register that part of ALU.

6. The BSA instruction is

SECTION – B

(Short Essay)

Answer **any 6** questions.　　　　　　　　　　　　　　　　　　**(6×2=12)**

7. What are assembler directives ?

8. What are interrupt service routines ?

9. What are the flag manipulation instructions in 8086 Microprocessor ?

10. Give an account of the following :

　　a) MOV C,D

　　b) MOV B,D

　　c) HLT.

P.T.O.

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.   (4×3=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.   (2×5=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.

————————————

K21U 1937

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

PART – A
(Short Answer)

Answer **all** questions.   (6×1=6)

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
(Short Essay)

Answer **any 6** questions.   (6×2=12)

7. Differentiate Maskable and Non-Maskable interrupts.

8. Explain the features of Microprocessors.

9. Explain the bus organization of 8085 microprocessor.

10. Explain any two control flags.

11. What is the use of segment register ?

P.T.O.

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.   (4×3=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)

Answer **any 2** questions.   (2×5=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. : ....

Name : ....

III Semester B.C.A. Degree CBCSS (OBE) – 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 :   (6×1=6)

1. Define Stack.

2. Explain Bus Cycle.

3. Define bandwidth.

4. What is RISC processors ?

5. Explain instruction register and decoder.
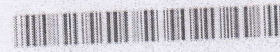
6. Explain the use of INTA pin.

PART – B
(Short Essay)

Answer **any 6** questions :   (6×2=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)

(4×3=12)

Answer **any 4** questions :

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)

(2×5=10)

Answer **any 2** questions :

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.

_____