19CMU21

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2022
(Fourth Semester)

Branch – **COMPUTER SCIENCE**

MICROPROCESSOR

Time: Three Hours Maximum: 75 Marks

SECTION-A (10 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks (10 x 1 = 10)

1. The microprocessor consists of?
   (i)ALU (ii) Register Array
   (iii)Control unit (iv) All of the above

2. The ____ controls the flow of data and instructions within the computer.
   (i)Control unit (ii) Register Array
   (iii)Accumulator (iv) All of the above

3. Which of the following is not a feature of a microprocessor ?
   (i)Versatility (ii)Reliability
   (iii)Low bandwidth (iv)Low power consumption

4. Which of the following is not an RISC processors?
   (i)Power pc:501 (ii) DEC Alph:210642
   (iii)MP:TS(R10000) RISC (iv)PA-RISC: HP 7100LC

5. SP stands for?
   (i)Digital signal processor (ii) Digital sign processor
   (iii)Digital signal program (iv) Data signal processor

6. he 8085 microprocessor is an 8-bit Microprocessor designed by?
   (i) IBM (ii)Dell
   (iii) Intel (iv) Vax

7. There are____ general purpose register in 8085 processor?
   (i)5 (ii)6
   (iii)7 (iv)8

8. MVIK,20F is an example of ____ addressing mode.
   (i)Immediate (ii) Register
   (iii)Direct (iv)Indirect

9. In 8086 microprocessor can access up to?
   (i)512 kb (ii) 1 mb
   (iii)2 mb (iv) 256 kb

10. Which flag represents the result when the system capacity is exceeded?
    (i)carry flag (ii)Auxiliary flag
    (iii)Trap flag (iv)Overflow flag

Cont...

SECTION - B (25 Marks)

Answer **ALL** questions
ALL questions carry **EQUAL** Marks (5 x 5 = 25)

11 a) Describe the 8085 bus organization?

OR

b) Explain the I/O devices in microprocessor?

12. a) Explain the buffer with example?

OR

b) Discuss about the address decoding with diagram.

13. a) Explain the branch operations in detail.

OR

b) Write about the Additional data transfer and 16 bit arithmetic instructions.

14. a) Generalize the steps to find the largest number in an array with example.

OR

b) Demonstrate the how to find the sum of series of 8-bit numbers with example?

15. a) Write about the evolution of 8086 microprocesor.

OR

b) Discuss about the memory organization of 8086.

SECTION -C (40 Marks)

Answer **ALL** questions
ALL questions carry **EQUAL** Marks (5 x 8 = 40)

16. a) Generalize the memory classifications.

OR

b) State the importance of internal data operations.

17. a) Explain in detail about the 8085 microprocesor?

OR

b) Briefly explain about the 8085-based microcomputer.

18. a) Explain the Datatransfer(copy) instructions?

OR

b) Discuss about the logic operations in detail.

19. a) Demonstrate the addition and subtraction of two 8 bit numbers using suitable example.

OR

b) Discuss about the division of two-8-bit data in detail.

20. a) Describe the block diagram of 8086 microprocessor.

OR

b) Write the pin configuration of 8086 in detail.

Z-Z-Z END