

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2023
(Fourth Semester)

Branch – COMPUTER SCIENCE

MICROPROCESSOR

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1) What is the store by register?
(i) data (ii) operands (iii) memory (iv) None of these
- 2) Accumulator based microprocessor example are _____.
(i) Intel 8085 (ii) Motorola 6809
(iii) Intel 8085 and Motorola 6809 (iv) Apple
- 3) Which is used to store critical pieces of data during subroutines and interrupts
_____.
(i) Stack (ii) Queue (iii) Accumulator (iv) Data register
- 4) Which is not the control bus signal _____.
(i) READ (ii) WRITE (iii) RESET (iv) None of these
- 5) DS stand for _____.
(i) Data segment (ii) Direct segment (iii) declare segment (iv) Divide segment

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6) a) Explain the various operations of microprocessors.
OR
b) Narrate the bus organization of 8085 microprocessor with diagram.
- 7) a) Summarize the bus communication process in 8085 microprocessor
OR
b) Describe the memory interfacing of 8085 microprocessor.
- 8) a) How will you use counting and indexing in programming techniques? Give example.
OR
b) Outline the different types of branch operations with example.
- 9) a) State the steps to addition of two 8/16 bit numbers.
OR
b) Analyze the division of two 8 bit numbers with example.
- 10) a) Show the silent features of advanced microprocessor 8086.
OR
b) Enumerate the general architecture of 8086 microprocessor.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11) a) Analyze the internal data operations and the 8085 registers.
OR
b) Enumerate the memory classifications of 8085 microprocessors.
- 12) a) Discuss the demultiplexing of address and data bus with diagram.
OR
b) Examine the address decoding and memory addresses of MPU.
- 13) a) Identify the various types of arithmetic operations with example.
OR
b) Discover the additional data transfer and 16 bit arithmetic instruction.
- 14) a) Elucidate the sum of series of 8 bit numbers.
OR
b) Compare the masking of least significant and most significant bits of an 8 bit data.
- 15) a) Draw and explain the memory organization of 8086 microprocessor.
OR
b) Outline the pin configuration of 8086 microprocessor with diagram.

Z-Z-Z END