

(FOR THE CANDIDATES ADMITTED  
DURING THE ACADEMIC YEAR 2023 ONLY)

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SUB CODE **23UIT3A1**  
REG.NO. :

**N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI**  
**END-OF-SEMESTER EXAMINATIONS : NOV-2024**  
**B.Sc. IT** **MAXIMUM MARKS: 75**  
**SEMESTER : III** **TIME : 3 HOURS**

**PART – III**

**23UIT3A1 – MICROPROCESSOR & ASSEMBLY LANGUAGE PROGRAMMING**  
**SECTION – A (10 X 1 = 10 MARKS)**

**ANSWER THE FOLLOWING QUESTIONS. (K1)**

- Advanced Micro Devices (AMD) produced the \_\_\_\_\_ family of integrated circuits (ICs) in 1975 as bit-slice microprocessor components.  
a) Am2910                      b) Am2900                      c) Am2930                      d) Am2901
- CISC stands for \_\_\_\_\_  
a) Complex Instruction Standard Computer                      b) Complex Integrated Set Computer  
c) Complex Instruction Set Computer                      d) Control Instruction Set Computer
- The 8086 Microprocessor having ----- types of instruction groups.  
a) 6                      b) 4                      c) 8                      d) 7
- \_\_\_\_\_ is the example of data movement group.  
a) JMP                      b) RCL                      c) POP                      d) XOR
- The Pentium microprocessor contains \_\_\_\_\_ address bus and 64-bit data bus.  
a) 8-Bit                      b) 32-Bit                      c) 64-Bit                      d) 16 Bit

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES (K2)**

- What do you meant by Embedded Processor?
- List out the Operating modes of 80486 Processor.
- Define Segment Override.
- Define Bipolar to Unipolar Converter
- What do you mean by 'REP' in instructions in ALP?

**SECTION – B (5 X 5 = 25 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**

**(K3)**

- a) Compare Scalar & Super Scalar processors.  
(OR)  
b) List out the Advantages of RISC & CISC processors
- a) Explain in detail about Segment Register Selection.  
(OR)  
b) Develop an Assembly language program for Multibyte Addition
- a) Examine the Register Organization of 486 Microprocessor

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(OR)

b) Describe in detail about the Interrupts and its types of 486 Micro Processor

14. a) Compare and Classify the Pentium II and III Processors.

(OR)

b) Point out the difference between Core i3, i5 and i7 processors.

15. a) Inference in detail about Bipolar to Unipolar Converter

(OR)

b) Narrate in detail about A/D converter and Application.

**SECTION – C**

**(5 X 8 = 40 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**

**(K4 (Or) K5)**

16. a) Discuss about 8086 Register Organization.

(OR)

b) Conclude in detail about Evolution of Microprocessors

17. a) Develop an ALP program to find the Largest Number in a Data Array

(OR)

b) List out the 8086 instructions and Explain with suitable examples.

18. a) Discuss in detail about 486DX Architecture

(OR)

b) Summarize in detail about 80386 and 80486 Processors

19. a) List out the Core Processors (Quad, Octa &, Penta) and Compare

(OR)

b) Discuss in detail about Mobile Processor Models and Architecture.

20. a) Discuss in detail about Interfacing of ADC 0808 or ADC 0809 to Intel 8086.

(OR)

b) With the flow chat, explain the microprocessor based measurement and control of temperature.