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FOR THE CANDIDATES ADMITTED DURING THE ACADEMIC YEAR 2021 ONLY) **REG.NO**

NGM COLLEGE (AUTONOMOUS) POLLACHI

END-OF-SEMESTER EXAMINATIONS: DECEMBER-2022

B. Sc-Information Technology **MAXIMUM MARKS: 70**

III SEMESTER **TIME: 3 HOURS**

PART III

MICROPROCESSOR AND ASSEMBLY LANGUAGE PROGRAMMING

SECTION – A **(10 X1 = 10 MARKS)**

ANSWER THE FOLLOWING QUESTIONS

MULTIPLE CHOICE QUESTIONS **(K1)**

1. The microprocessor of a computer can operate on any information if it is present in _____ only.
   a) Program Counter b) Flag
   c) Main Memory d) Secondary Memory

2. Which of the following is not a data copy/transfer instruction?
   a) MOV b) PUSH c) DAS d) POP

3. The first processor with an inbuilt floating point unit is_____
   a) 80386 b) 80486 c) 80286 d) 8086

4. Because of Pentium's superscalar architecture, the number of instructions that are executed per clock cycle is_____
   a) 1 b) 2 c) 3 d) 4

5. How many control lines are present in analog to digital converter in addition to reference voltage?
   a) Three b) Two c) One d) None of the mentioned

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

6. Define Microprocessor.

7. Define Addressing mode.

8. What is the major limitation of 80386 and 387?

9. List out any two features of Pentium processor.

10. What is the advantage of using flash type A/D converter ? **(CONTD…2)**

SECTION – B (5 X 4 = 20 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.
(Qn. No. 11 to 15)10 questions (a & b) – 2 questions from each unit. (K3)

11. a) Examine the pin Diagram of Intel 8086 with its architecture.

(OR)

b) Compare RISC and CISC Processors and its characteristics.

12. a) Summarize 8086 Instruction set and its functions.

(OR)

b) Show how the sum of a series and multi byte addition is performed with an example.

13. a) Sketch the various operating modes of Intel 486 with a neat diagram.

(OR)

b) Sketch 486DX architecture neatly and Explain.

14. a) Compare Pentium Pro with Pentium III and IV.

(OR)

b) Explain mobile processors with its architecture.

15. a) Show the functional operations of Bipolar to Unipolar converter with its applications

(OR)

b) List the microprocessor based measurement used to control the quality.

SECTION - C (4 X 10 = 40 MARKS)

ANSWER ANY FOUR OUT OF SIX QUESTIONS
(16th QUESTION IS COMPULSORY AND ANSWER ANY THREE QUESTIONS
(FROM Qn. No : 17 to 21) (K4 (Or) K5)

16. Summarize the evolution of microprocessors with examples.
17. List the various 8086 addressing modes with the pin diagram.
18. Categorize relocation and block move using REP instruction set.
19. Explain addressing modes of 80486 with its architecture and features.
20. Compare Dual Core with Core2 Duo - i3 - i5 - i7 – i9 and also outline the features of Quad and Octa processor chip.
21. How are ADC 0808 and ADC 0809 interfaced in Intel 8086? Distinguish and explain with an example.

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ETHICAL PAPER