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(FOR THE CANDIDATES ADMITTED **20PPS4E3**

DURING THE ACADEMIC YEAR 2020-21 ONLY) **REG.NO.**

N.G.M.COLLEGE (AUTONOMOUS): POLLACHI

END-OF-SEMESTER EXAMINATIONS: JULY - 2022

M.Sc. PHYSICS **MAXIMUM MARKS: 70**

SEMESTER - IV **TIME : 3 HOURS**

MAJOR ELECTIVE –III : MICROPROCESSOR AND OBJECT ORIENTED PROGRAMMING WITH C++

SECTION - A (10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

MULTIPLE CHOICE QUESTIONS. **(K1)**

1. 8085 is a ---------- bit processor.

a) 4 b) 8 c) 16 d)32

2. LXIH, address is ---------- instruction in μP 8085.

a) One byte b) Two byte c) Three byte d) Four byte

3. In 8085, ---------- pairs of registers are available

a) 3 b) 4 c) 6 d) 7

4. 8051 series has how many 16 bit registered?

a) 2 b) 3 c) 1 d) 0

5. C++ is ----------

a) Procedural Programming Language. b) Object Oriented Programming Language.

c) Functional Programming Language. d) Both (a) and (b).

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

6. Give two examples for data transfer instructions in 8085 microprocessor.
7. What is the instruction set used for finding the complement of a Accumulator content?
8. What is operator overloading?
9. In inheritance, what is the other name for Base class?
10. What is meant by Polymorphism?

SECTION – B (5 X 4 = 20 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)

11. a) Explain instruction cycle in 8085.

(or)

b) What is Stack Pointer? What is its importance in Microprocessor?

(CONTD…2)

12. a) Discuss the programming of Microprocessor 8085 using a Flowchart.

(or)

b) Give the application of Microcontroller.

13. a) Give the benefits of OOP.

(or)

b) Explain write ( ) member function.

14. a) Write a short notes on destructors.

(or)

b) Give the rules for Overloading operations.

15. a) Explain the concept of Multilevel Inheritance with an example.

(or)

b) Describe 'this' pointer with suitable example.

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. Explain the concept of Hierachical Inheritance.

17. Give the architecture of 8085 Microprocessor.

18. Give an example for looping programs in Microprocessor 8085.

19. Explain Static data members and member functions in C++.

20. Explain in detail overloading binary operators using friends.

21. Describe pointers to Derived classes with example.

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