

ADMISSION NUMBER									

School of University Polytechnic

Diploma in Computer Science and Engineering
Semester End Examination - Jun 2024

Duration : 180 Minutes
Max Marks : 100

Sem IV - N1DF404B - Microprocessor and Microcontroller

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Explain the role of the Arithmetic Logic Unit (ALU) and Control Unit in the internal architecture of the 8085 microprocessor. K1 (2)
- 2) List features of a 8085 microprocessor, highlighting their importance in computing. K2 (4)
- 3) Explain the differences between microcomputers, microcontrollers, and microprocessors. K2 (6)
- 4) Explore the application of microprocessors in the automotive industry, emphasizing their role in enhancing vehicle control systems and safety features. K3 (9)
- 5) Examine the advantages and disadvantages of RAM. K3 (9)
- 6) Outline the advantages of microcomputers. K5 (10)
- 7) Discuss the distinctions between the 8085 and 8086 microprocessors. K4 (12)
- 8) Examine the architecture of the 8086 microprocessor, focusing on its segmented memory structure. K5 (15)
- 9) Highlight key differences between RISC and CISC processors. K5 (15)
- 10) Examine the pin diagram of the 8085 microprocessor, emphasizing its key functional groups and their intricate roles. Evaluate how the arrangement of pins contributes to the overall functionality of the microprocessor. K6 (18)