

ANURAG Engineering College

(An Autonomous Institution)

III B.Tech I Semester Supplementary Examinations, June/July-2024

MICROPROCESSORS AND MICROCONTROLLERS

(COMMON TO ECE & CSE)

Time: 3 Hours**Max. Marks: 75****Section – A (Short Answer type questions)****Answer All Questions****(25 Marks)**

	Course Outcome	B.T Level	Marks
1. List the features of 8086 microprocessor.	CO1	L1	2M
2. List and explain segment registers.	CO1	L2	3M
3. What is interfacing?	CO2	L1	2M
4. Write a short note on interfacing LCD to 8255.	CO2	L2	3M
5. Explain the stack operation in 8051.	CO3	L1	2M
6. Explain the importance of 8051 microcontroller over microprocessor.	CO3	L2	3M
7. List out Different interrupts of 8051 Microcontroller.	CO4	L1	2M
8. Compare PCON with SCON of 8051 Microcontroller in detail.	CO4	L2	3M
9. List out few examples of Proteus.	CO5	L1	2M
10. What are the advantages of Arduino.	CO5	L2	3M

Section B (Essay Questions)**Answer all questions, each question carries equal marks.****(5 X 10M = 50M)**

11. A) Explain with a neat block diagram the architecture of 8086.	CO1	L2	10M
OR			
B) Develop an 8086 Assembly Language Program to perform the Arithmetic operations	CO1	L3	10M
12. A) Explain about the functional block diagram of 8255.	CO2	L2	10M
OR			
B) Write about external memory interfacing to 8255.	CO2	L3	10M
13. A) Explain the architecture of 8051 micro controller in detail?	CO3	L2	10M
OR			
B) Explain with a neat diagram the memory organization of 8051.	CO3	L2	10M
14. A) Explain about the programming timer interrupts of the 8051 real time controllers?	CO4	L2	10M
OR			
B) Define the different types of ranges of Jump instructions and list the various Jump Instructions available in 8051 microcontrollers.	CO4	L3	10M
15. A) Explain about arduino? Write the instruction programming using arduino?	CO5	L2	10M
OR			
B) Write the commands to execute the program and give the simple examples of arduino?	CO5	L3	10M