

Reg. No.....

Name.....

B. Sc. DEGREE END SEMESTER EXAMINATION – APRIL/JULY 2021**SEMESTER –2: COMPUTER APPLICATION (CORE COURSE)****COURSE: 15U2CRCAP3: MICRO PROCESSORS AND COMPUTER ORGANIZATION***(Common for Supplementary 2018/2017/2016 /2015 Admissions)*

Time: Three Hours

Max Marks: 75

PART A***Answer all questions. Each question carries 1 mark.***

1. Name the two blocks of 8086 architecture.
2. What characteristic of RAM memory makes it not suitable for permanent storage?
3. What is Read Access Time?
4. What are SIM and RIM instructions?
5. The fetch-decode-execute cycle refers to the process by which data is read from the hard drive and stored in memory. True or False?
6. Define System Bus.
7. What are the control signals in a microprocessor?
8. What is EEPROM?
9. List the advantages of write through cache.
10. How effective address is calculated in Base Register Addressing Mode?

(1 x 10 = 10)

PART B***Answer any eight questions. Each question carries 2 marks.***

11. What is a Read Only Memory? Comment "Is a ROM a Random Access Memory".
12. What is an interrupts?
13. Distinguish between Maskable interrupts and Non-Maskable interrupts?
14. What is stack?
15. List down the general purpose and special purpose registers of 8086.
16. A computer has 32 MB (megabytes) of memory. How many bits are needed to address any single byte in memory?
17. What is the difference between zero address, one address and two address instruction?
18. How SRAM is different from DRAM?
19. What is the main difference between implied and immediate modes of addressing?
20. What is the function of BX and CX registers 8086 microprocessor.

(2 x 8 = 16)

PART C

Answer any five questions. Each question carries 5 marks.

21. Explain Address Bus, Data Bus and Control Bus in Microprocessor? What are the differences between them?
22. Explain the different flags in 8086.
23. Compare the feature of Pentium III and Pentium 4.
24. Draw the internal architecture of 80286.
25. Write short notes on any two auxiliary memories?
26. Explain the principle of stack. What are LIFO and FIFO operations of stack?
27. What are the functions of bus interface unit (BIU)?
28. A computer has 128 MB of memory. Each word in this computer is eight bytes. How many bits are needed to address any single word in memory?

(5 x 5 = 25)

PART D

Answer any two questions. Each question carries 12 marks.

29. Explain the bus structure Connecting CPU and memory.
30. Comparison between a 32 bit and 64 bit processors
31. What is an instruction? How an instruction is executed? With example explain three, two, one, zero address instructions.
32. How is Pentium Processor different from Pentium Pro Processor regarding its basic features?

(12 x 2 = 24)
