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# B.C.A. DEGREE (C.B.C.S.S.) EXAMINATION, NOVEMBER 2022

# Fourth Semester

## MICROPROCESSOR AND PC HARDWARE

(2013—2016 Admissions)

Time: Three Hours

Maximum Marks: 80

#### Part A

Answer all questions.
Each question carries 1 mark.

- 1. How many I/O addresses are there in Intel 8085 microprocessor?
- 2. What is LDA instruction in 8085?
- 3. How many bits are there in the data bus of 8086?
- 4. How many registers are provided by 8086?
- 5. What is super I/O chip?
- 6. What is a processor bus?
- 7. What is VFAT?
- 8. What is disk formatting?
- 9. What is physical memory?
- 10. What is upper memory area?

 $(10 \times 1 = 10)$ 

## Part B

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

- 11. How many instructions are there in 8085?
- 12. What are the various addressing modes of 8085?
- 13. What is DAD instruction in 8085?
- 14. What are the 2 modes of operation of 8086?
- 15. What are the basic components of a motherboard?

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- 16. What is the function of a memory bus?
- 17. What is NTFS?
- 18. What is the role of a stack pointer in 8086?
- 19. What is destination index in 8086?
- 20. What is high memory area?
- 21. What is the difference between extended and expanded memory?
- 22. What is the use of log files?

 $(8 \times 2 = 16)$ 

## Part C

Answer any **six** questions. Each question carries 4 marks.

- 23. Briefly, describe the register structure of 8085.
- 24. Briefly, explain the status flags of 8085.
- 25. Briefly, explain PUSH and POP operations in 8086?
- 26. Briefly, explain various registers in 8086.
- 27. Briefly, explain various interrupts in 8086.
- 28. Briefly, explain various types of I/O buses.
- 29. Briefly, explain ROM BIOS.
- 30. Briefly, explain FAT disk.
- 31. Briefly, explain memory modules.

 $(6 \times 4 = 24)$ 

# Part D

Answer any **two** questions. Each question carries 15 marks.

- 32. Explain the architecture of 8085 with diagrams and illustrations.
- 33. Explain architecture of 8086 with diagrams and illustrations.
- 34. Explain addressing modes of 8086 with diagrams and illustrations.
- 35. Explain the construction and working of a hard disk drive along with its various operations.

 $(2 \times 15 = 30)$ 

