

Roll No..... Total No. of Printed Pages : 4

2063

Second Year (T.D.C.) Science Examination, 2017

COMPUTER SCIENCE

(Computer Organization)

Paper-III

Time Allowed : Three Hours

Maximum Marks : 50

PART-A [Marks : 10

Answer all questions (50 words each).

All questions carry equal marks.

PART-B [Marks : 25

Answer **five** questions (250 words each), selecting **one** from each Unit. All questions carry equal marks.

PART-C [Marks : 15

Answer any **two** questions (300 words each).

All questions carry equal marks.

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PART-A

1. Answer the following questions :

- (i) What is Computer Organization?
- (ii) What is Micro Operation?
- (iii) What does three address Instruction mean?
- (iv) What is Program Counter?
- (v) How does sign represented in signed magnitude data?
- (vi) What are Interrupts?
- (vii) What do you meant by Memory Hierarchy?
- (viii) What do you mean by Mapping a Cache?
- (ix) Give an example of 2-bytes and 3-bytes instruction.
- (x) What is the use of ALE in 8085 Microprocessor?

PART-B

UNIT-I

2. Discuss the working of each units of a Computer by giving its block diagram.
3. Discuss some basic micro operations with examples.

UNIT-II

4. Discuss the Register Organization of CPU.
5. What is Pipeline? How it works?

UNIT-III

6. Explain with example Subtraction process of Signed Magnitude Data. Also write its Algorithm?
7. Explain how peripherals are interfaced with CPU.

UNIT-IV

8. Differentiate between RAM and ROM.
9. Explain any one method of Cache Mapping.

UNIT-V

10. How 8085 Instructions are classified as groups?
11. Write an Assembly language program to find Greater of two 8-bit data.

PART-C

12. Explain how $IC = FC + Ex$, give steps.
13. Explain DMA process in detail.
14. Explain the concept of Virtual Memory.
15. Explain the working of 8085 Microprocessor by giving its block diagram.
