



METHODIST
COLLEGE OF ENGINEERING AND TECHNOLOGY
Approved by AICTE New Delhi | Affiliated to Osmania University, Hyderabad
Abids, Hyderabad, Telangana, 500001

COA Assignment 1

Date: - 15th Feb 2020

1. Convert the hexadecimal number F3A7C2 to binary
2. Draw IEEE 754 formats of floating-point representation
3. What is direct and indirect address instructions.
4. What is the instruction set completeness?
5. Explain the sequence of micro operations for PUSH and POP instructions.
6. Show the hardware for Booths multiplier.
7. Derive an algorithm for floating point multiplication.
8. Explain various phases of an instruction cycle.
9. What are the two instructions needed in the basic computer in order to set the E flip-flop
10. a) Explain Booths multiplication algorithm with the help of numerical example.
b) Compare and contrast between restoring and non-restoring division algorithm.
11. a) Explain common bus system of the general-purpose computer
b) Distinguish between hardwired and micro programmed control unit.
12. a) Draw the flow chart for signed addition/subtraction and also draw the hardware required for that
b) What are the difficulties of Floating-point representation?
13. a) Explain timing and control unit of the general-purpose computer.
b) What is the program interrupt? Explain interrupt cycle in the computer.
14. Draw the flow chart for fixed point division algorithm.

Last Date for Submission: - 24th Feb 2020