

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE – RAIGAD -402 103
Semester Examination – December - 2018

Branch: Computer Science and Engineering

Subject with Subject Code:- Computer Architecture & Organization(BTCOC304)

Date:-7/12/2018

Sem.:- I

Marks: 60

Time:- 3 Hr.

Instructions to the Students

1. Each question carries 12 marks.
2. Attempt **any five** questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly

(Marks)

- Q.1. a) Describe the structural overview of computer. (5)
b) Define stored program concept and Explain Von Neumann's Architecture with diagram. (7)
- Q.2. a) List assembler directives? Assuming any assembler, give the necessary directives required for any program. (5)
b) Explain in detail different types of addressing modes. (7)
- Q.3. a) Convert $(100.125)_{10}$ in IEEE-754 single precision floating point representation. (5)
b) Sketch and explain flowchart for multiplication of floating point numbers. (7)
- Q.4. a) Encode the data 1101 in even parity by using Hamming Code. (5)
b) Elaborate various types of ROM: Magnetic as well as optical (7)
- Q.5. a) Discuss Micro operations to execute an instruction MOV R1,R2. (5)
b) Explain Wilki's design of Micro programmed Control Unit. (7)
- Q.6. a) Explain Instruction Pipelining. (5)
b) Discuss Interrupt Driven I/O. Compare it with Programmed I/O and explain types of Interrupts (7)