M.Sc. IT SEM 1

Exam February 2021

Subject: 101 Digital Computer Organization Code : 23032

Time 1:30 hours 1 7 FEB 2021 Marks: 42

Instructions: Attempt any three questions out of four. Q-1 Explain Instruction Execution and CPU organization in detail 14 OR Q-1 (A) Explain Different microprocessor chips in detail. Q-1 (B) Write a detail note on ISA bus, PCI bus and USB. 7 Q-2 Explain basic, universal and exclusive Gate with example. 14 Q-2 (A) Explain product of sum and sum of product with example. 7 Q-2 (B) Write a detail note on De Morgan's Theorems. 7 Q-3 Explain Multiplexer, De-Multiplexer in detail. 14 OR Q-3 (A) Explain in brief. Encoder and Decoder. 7 Q-3 (B) Write a note on Full adder 7 Q-4 Explain SR Flip Flop and D Flip Flop in detail. 14 Q-4 (A) Write a note on Shift Registers, Universal Register 7 Q-4 (B) **Discuss Synchronous & Asynchronous Counters** 7