

# UTTARAKHAND TECHNICAL UNIVERSITY

Paper ID and Roll No. to be filled in your Answer book

Roll. No.

--	--	--	--	--	--	--	--	--	--	--

**EVEN SEMESTER EXAMINATION-2019**

**MICROPROCESSOR**

**Subject Code : TCS-405**

## Section A

**(Attempt any four. All question carries equal marks)**

**4\*5 = (20 marks)**

Q1. Define the following terms:

- What is microprocessor? Explain in detail.
- What is the use of READY signal in 8085?
- Explain PUSH and POP instructions?
- Explain minimum/maximum mode operation in 8086.
- What is LXIH, LDA?

## Section B

**(Attempt any four. All question carries equal marks)**

**4\*5 = (20 marks)**

- What do you mean by superscalar architecture?
- Explain memory segmentation in 8086 microprocessors.
- What are assembler directives?
- Write short note on Dual Core and Core 2 Duo processor?
- What is handshaking in Microprocessor?

## Section C

**(Attempt any four. All question carries equal marks)**

**4\*5 = (20 marks)**

- Give the features of 80186 & 80286.
- What is instruction pipelining in 8086?
- Draw the internal block diagram of 8086 microprocessor.
- What is physical address & offset address. Explain
- Draw the block diagram and Pin diagram of 8051 Microcontroller.

## Section D

**(Attempt any two. All question carries equal marks)**

**2\*10= (20 marks)**

- Discuss the pin diagram of 8085 microprocessor.
- What are the advance design features of Pentium Processors?
- Write a program to divide two 8-bit numbers.

## Section E

**(Attempt any two. All question carries equal marks)**

**2\*10= (20 marks)**

- Discuss interfacing of matrix keyboard with 8051 with neat and clean diagram.
- Explain in detail the 80486 system with block diagram.
- Explain programmable peripheral interface (PPI).