BTS–V(S)–04.19–0833 Reg. No. | | | | | | | | |

A

B.Tech. Degree V Semester Supplementary Examination April 2019

CS 15-1505 ADVANCED MICROPROCESSORS AND MICROCONTROLLERS

(*2015 Scheme*)

Time: 3 Hours Maximum Marks: 60

PART A

(Answer *ALL* questions)

(10 × 2 = 20)

I. (a) Explain the protected mode of operation of 80386 microprocessor.
(b) Compare and contrast RISC and CISC architectures.
(c) Explain MMX technology.
(d) Detail about the major issues in multi-core processing.
(e) Enumerate the technical features of IA Processors.
(f) Detail about the various interrupts of 8051 microcontroller.
(g) What are the classes of instructions of 8051 microcontroller.
(h) Explain any 5 special function registers of 8051 microcontroller.
(i) Explain memory of PIC16F84A.
(j) Write short notes on registers of PIC 18F2420.

PART B

(4 × 10 = 40)

II. Draw and explain Intel 80386 microprocessor architecture. (10)

OR

III. (a) Explain flag register of 80386 microprocessor. (5)
(b) Compare and contrast features of Pentium –II, Pentium-III and Pentium-IV processors. (5)

IV. (a) Detail about Nahelam microarchitecture. (5)
(b) Write short notes on multi-core processors. (5)

OR

V. (a) Explain Silvermont microarchitecture. (5)
(b) Differentiate between Core i3, i5 and i7 processors. (5)

VI. With a neat diagram explain the architecture of 8051 microcontroller. (10)

OR

VII. (a) Explain memory organization of 8051. (5)
(b) Explain Pin diagram of 8051 microcontroller. (5)

VIII. Explain architecture of PIC16F84A. (10)

OR

IX. (a) Write notes on registers of PIC 18F2420. (5)
(b) Explain the interrupts of PIC 18F2420. (5)

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