Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 41205

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2015.

Fifth/Sixth Semester

Electronics and Communication Engineering

EC 1301 — MICROPROCESSORS AND MICRO CONTROLLERS

(Common to Electronics and Instrumentation Engineering, Electrical and Electronics Engineering and Instrumentation and Control Engineering)

(Regulation 2008)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Which is the least priority interrupt in 8085?
2. What is meant by machine cycle?
3. List out the features of 8279.
4. Compare serial and parallel data transfer.
5. What is the advantages of using segment registers in 8086?
6. What is the function TRAP and Direction Flag?
7. Give the bit configuration of PCON.
8. What is the use of Timer and counter in 8051?
9. Enlist the various flags in PSW register.
10. Write the data exchange instructions in 8051.

PART B — (5 × 16 = 80 marks)

11. (a) Explain the architecture of 8085 with a neat sketch.

Or

(b) Write an ALP to arrange the array of data in ascending order.

12. (a) Explain 8251 working with a neat diagram and give the command word format and status word format.

Or

(b) Explain 8279 block diagram and explain CPU interface and control section.

13. (a) Discuss in detail the interrupts and interrupt service routine in 8086 processor.

Or

(b) Discuss the instruction set of 8086.

14. (a) Explain the architecture of 8051.

Or

(b) (i) Explain the operation two serial mode of data transmission. (10)

(ii) Give the internal RAM address for TMOD, TCON, TL0, TL1. (6)

15. (a) Explain the addressing modes of 8051.

Or

(b) Discuss the register set of 8051 and also discuss how an ADC is interfaced with 8051.
