Roll No. | | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(ECE)/(ETE) (2011 Onwards)
B.Tech.(Automation & Robotics) (2011 & Onwards)
B.Tech.(Electronics Engg.) (2012 Onwards)
(Sem.–5)

MICRO PROCESSORS & MICROCONTROLLERS

Subject Code : BTEC-504
Paper ID : [A2106]

Time : 3 Hrs. Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

Q1 Answer briefly :

a. What is the basic difference between microprocessor and microcontroller?

b. Give examples of embedded products using microcontroller.

c. What is the function of accumulator in 8085?

d. What is the function of program counter?

e. What does an ALU do?

f. How does instructions differ from a directive?

g. What are the advantages of SRAM as compare to DRAM?

h. Write the instruction to add the values 16H and CDH. Place result in register R2.

i. What are the advantages of serial communication over parallel communication?

j. Why must the data bus be bidirectional?

SECTION-B

Q2 Discuss address bus and data bus in 8085.

Q3 Draw and explain 8085 microprocessor pin configuration.

Q4 Differentiate ACALL and LCALL instruction.

Q5 What is the difference between EPROM and EEPROM?

Q6 Explain functional block diagram of 8085.

SECTION-C

Q7 Explain in detail :

a. TCON register.

b. RS 232 Pins.

Q8 Explain how writing, assembling and executing of a program done in 8085.

Q9 Write a short note on :

a. Stepper motor interfacing in 8051.

b. Data transfer operations in 8085.