

S.D.E.
M.C.A. Sem-IV : SUMMER-2019
SUBJECT: IT ELECTIVE – II: c) EMBEDDED SYSTEMS DESIGN &
PROGRAMMING

Day: Thursday
Date: 16/05/2019

Time: 02.00 PM TO 05.00 PM
Max. Marks: 80

S-2019-5272

N.B.:

- 1) Attempt any **FOUR** questions from Section –I and any **TWO** questions from Section –II.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in SAME answer book.

SECTION-I

- Q.1** Discuss various programmable logic devices. (12)
- Q.2** Explain in brief Target hardware platform in Embedded system. (12)
- Q.3** Explain the design issues of Microcontroller based Embedded system. (12)
- Q.4** Discuss in detail Application Specific Control circuitry in Embedded system. (12)
- Q.5** Write short notes on any **TWO** of the following: (12)
- a) ADC
 - b) DAC
 - c) Development tools

SECTION-II

- Q.6** Write 8051 assembly language program to add two given numbers. (Consider any two numbers)? (16)
- Q.7** How the software and hardware interrupts are handled in 8051 microcontroller? (16)
- Q.8** Explain in brief: (16)
- i) Internal Architecture of 8051 microcontroller
 - ii) MCS 51 Kit

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