## S.D.E.

## M.C.A. Sem - V : WINTER - 2018

## SUBJECT: I.T, ELECTIVE- III EMBEDDED SYSTEM INTERFACING & EMBEDDED COMMUNICATION SYSTEM

Time: 10.00 AM TO 1.00 PM Day: Friday Date: 30/11/2018 Max Marks: 80 W-2018-4821 N.B.: Attempt any FIVE questions from Section – I and any TWO questions from 1) Section - II Figures to the right indicate FULL Marks. 2) Answers to both the section should be written in **SEPARATE** answer book. 3) **SECTION - I** What is embedded system? Explain various trends in embedded system **Q.1** (10)development. What is Communication Services? Explain in detail Communication **Q.2** (10)Services. Explain different ADC techniques. (10)Q.3 Explain difference between microcontroller & microprocessor. (10)**Q.4** What are the various software interrupts? Explain any two in detail. (10)Q.5 Explain in detail Servo motor interfacing with neat diagram. (10)**Q.6** Write short notes (any TWO) (10)**Q.7** Pulse measurement a) DAC Techniques b) Ethernet connectivity c) **SECTION - II** Draw a neat labelled block diagram of 8051 microcontroller & explain (15)**Q.8** the functions of each block. What are the different communication protocols in embedded system? (15)**Q.9** Explain in detail any two.

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Q.10

each pin of LCD.

Explain LCD interfacing circuit with neat diagram & Explain function of (15)