P534

TE/Insem/APR-125
T.E. (Electronics Engineering) (Semester - II)
EMBEDDED PROCESSORS
(2015 Pattern)

Time :1 Hour]   *[Max. Marks : 30*

Instructions to the candidates:
1) *Answer Q.1 or Q.2, Q.3 or Q.4 and Q.5 or Q.6.*
2) *Figures to the right side indicate full marks.*
3) *Assume suitable data, if necessary.*

Q1) a)   Explain in brief System clocks of MSP430 Microcontroller.   **[6]**

   b)   List the features of MSP 430 Microcontroller.   **[4]**

         OR

Q2) a)   List features and applications of variants of the MSP 430 family MSP430x2x, MSP430x4x, MSP430x5x.   **[6]**

   b)   List key features of FRAM. Compare FRAM Vs Flash memory.   **[4]**

Q3) a)   Explain Comparator architecture of MSP 430 Microcontroller.   **[5]**

   b)   With the help of diagram explain process of PWM generation in MSP 430.   **[5]**

         OR

Q4) a)   Explain block diagram of Analog to Digital Conversion (ADC 10) of MSP 430 Microcontroller.   **[5]**

   b)   Explain I^2C Communication protocol in detail.   **[5]**

Q5) a)   Draw & Explain Data flow model of ARM 7.   **[6]**

   b)   What are the different modes of Operation in ARM 7.   **[4]**

         OR

Q6) a)   Draw & Explain Programming model of ARM 7.   **[6]**

   b)   What are the Advantages & Suitability of ARM Processor in Embedded Application.   **[4]**

♣ ♣ ♣