Total No. of Questions :10]

SEAT No. :

P2868

[Total No. of Pages :2

[4958]-1057
T.E. (Electronics)
EMBEDDED PROCESSORS
(2012 Course) (End Semester) (304211) (Semester - II)

Time : 2.30 Hours *[Max. Marks :70]*

Instructions to candidates:

1) ***All questions are compulsory.***
2) ***Figures to the right indicate full marks.***

Q1) a) State and Explain of ARM 7, ARM 9 and ARM 11. **[6]**

b) Describe CPSR and SPSR of ARM 7. **[4]**

OR

Q2) a) Explain following instruction (Any three). **[6]**

i) AND

ii) ORR

iii) EOR

iv) BIC instruction

b) Draw and Explain 3 stage pipeline in ARM 7. **[4]**

Q3) a) Draw and Explain Memory map of LPC 2148. **[4]**

b) Draw interfacing diagram of GLCD with LPC 2148 and write algorithm for same. **[6]**

OR

Q4) a) Explain Timer control register (TCR) and Timer counter register. **[6]**

b) Draw and Explain Timing diagram of SPL Protocol. **[4]**

P.T.O.

Q5) a) Write a feature and application of cortex A, cortex R, cortex M processor. **[8]**

b) Compare the cortex M_3 with ARM 7 TDMI. **[8]**

OR

Q6) a) Draw and Explain block diagram of ARM cortex M_3. **[8]**

b) Explain CMSIS standard with structure in detail. **[8]**

Q7) a) What is TET LCD. **[8]**

b) Draw and Explain architectural diagram of LPC 1768 Microcontroller. **[8]**

OR

Q8) a) Draw and Explain interfacing of 7 segment display with cortex 1768. **[8]**

b) Explain in detail clock and power control. **[8]**

Q9) Write a short node on following block in LPC 1768. **[18]**

a) CAN.

b) Ethernet.

c) USA.

OR

Q10)a) Draw and Explain interfacing diagram of DC motor using PWM of LPC 1768 also write Embedded C program for same. **[10]**

b) Draw and Explain block diagram of CAN controller. **[8]**