

**B.Tech. SEM -VI Electronics 2014 Course (CBCS) : SUMMER - 2019**

**SUBJECT: EMBEDDED SYSTEMS**

Day: Friday  
Date: 24/05/2019

Time: 02.30 PM TO 05.30 PM  
Max Marks. : 60

**S-2019-2744**

**N.B. :**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data, if necessary.

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|------------|--|-------------|
| <b>Q.1</b> | Define embedded system. Give one case studies.                                     | <b>(10)</b> |
|            | <b>OR</b>  |             |
| <b>Q.1</b> | Classify embedded system in brief.   | <b>(10)</b> |
| <b>Q.2</b> | Write and explain data types in embedded C.  | <b>(10)</b> |
|            | <b>OR</b>  |             |
| <b>Q.2</b> | Give the difference between mailbox, queue and pipes.                              | <b>(10)</b> |
| <b>Q.3</b> | What are GPIO's? Describe in detail.   | <b>(10)</b> |
|            | <b>OR</b>  |             |
| <b>Q.3</b> | Discuss different operation modes in ARM.  | <b>(10)</b> |
| <b>Q.4</b> | Write a program to send SMS using GSM modem and draw the interfacing for the same. | <b>(10)</b> |
|            | <b>OR</b>  |             |
| <b>Q.4</b> | Draw the interfacing diagram of LPC 2148 and I <sup>2</sup> C EEPROM.              | <b>(10)</b> |
| <b>Q.5</b> | Draw and explain block diagram of LPC 1768.  | <b>(10)</b> |
|            | <b>OR</b>  |             |
| <b>Q.5</b> | List the features of UART 0 and UART 1 and compare them.                           | <b>(10)</b> |
| <b>Q.6</b> | Draw and write program for the interfacing diagram of SSD with LPC 1768.           | <b>(10)</b> |
|            | <b>OR</b>  |             |
| <b>Q.6</b> | Explain TFT display in detail.   | <b>(10)</b> |

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