

1282**Code : 15EC62T***Register
Number*

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VI Semester Diploma Examination, April/May-2018**EMBEDDED SYSTEMS****Time : 3 Hours]****[Max. Marks : 100**

- Note :** (i) Answer any **six** full questions from Part – A.
(ii) Answer any **seven** full questions from Part – B.

BETA CONSOLE!**PART – A**

Diploma - [All Branches]

Beta Console Education **6 × 5 = 30**

3+

1. List any five applications of an embedded system.
2. List the working elements of an embedded system.
3. Write note on Sensors.
4. List the features of MSP 430.
5. Write note on memory mapping in MSP 430.
6. Explain MSP 430 arithmetic instructions with two operands.
7. Explain flow control instruction of MSP 430.
8. Explain Timer – A with block diagram.
9. Explain the operation of MSP 430 Comparator-A.



Diploma Question Papers [2015-19]

Beta Console Education

3+

PART - B

7 × 10 = 70

10. (a) Define Embedded system. Differentiate an embedded system from a general computing system.
(b) Explain memory mapping of MSP 430.
11. (a) Explain the Brown-out protection circuit in embedded system.
(b) List the basic characteristics and role of RTOS in embedded system.
12. Explain the role of (a) reset circuit (b) watch-dog timer in embedded system.
13. Explain the architecture of MSP 430 with block diagram.
14. Explain the different power modes of operation of MSP 430.
15. Explain the different flow control instructions of MSP 430.
16. Write a program to light LED's in both assembly and 'C' for MSP 430.
17. Explain hardware multiplier along with multiplier registers.
18. Explain MSP 430 interruptable and non-interruptable I/O with control registers.
19. Explain the architecture of MSP 430 ADC-10 with block diagram.