

B. Tech. sem-VIII, (2014 course), E & TC

B. Tech. Sem -VIII (E & TC Engg.) (2014 COURSE) (CBCS) :
WINTER - 2018

winter-2018

SUBJECT : SOFTWARE DEFINED RADIOS

Day : Thursday
Date : 15/11/2018

W-2018-2680

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

N. B. :

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labeled diagram **WHEREVER** necessary.
- 4) Assume suitable data, if necessary.

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- Q. 1 What is software defined radio? Give its applications. (10)
- OR**
- Explain an ideal software defined radio architecture. (10)
- Q. 2 What are the transmitter and receiver requirements of 3G RF devices? (10)
- OR**
- Explain ADC and DAC noise budget for SDR devices. (10)
- Q. 3 Explain the power requirements of SDR hardware components. (10)
- OR**
- Write a note on: "Chameleon Reconfigurable Communication Processor". (10)
- Q. 4 Write down software standards for software radio. (10)
- OR**
- What is major software architectural choices for software defined radio? (10)
- Q. 5 What are the principles of smart antenna system? (10)
- OR**
- Explain smart antenna architecture. (10)
- Q. 6 Explain software radio system design. (10)
- OR**
- What are the application potentials of low cost experimental software radio platform? (10)

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