

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

SUBJECT: RADIO FREQUENCY ENGINEERING

Day: Friday  
Date: 30/11/2018

Time: 02.30 PM TO 05.30 PM  
Max Marks. 60

W-2018-2599

N.B. :

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

Q.1 What is chip components? Explain chip and HF capacitors. (10)

OR

Q.1 Differentiate HF and chip resistors with neat diagram. (10)

Q.2 With neat diagram explain Vector Network analyzer? (10)

OR

Q.2 Explain with neat diagram short circuit time constant method. (10)

Q.3 Design common source amplifier with single tuned load. (10)

OR

Q.3 Describe different Bandwidth enhancement techniques. (10)

Q.4 Noise optimization with power. (10)

OR

Q.4 What are the noise parameters explain MOSFET. (10)

Q.5 What is RF oscillator explain with common gate FET. (10)

OR

Q.5 Describe function and startup module of colpitts oscillator. (10)

Q.6 Explain mixer fundamental with single ended diode mixer. (10)

OR

Q.6 What is RF mixer explain image reject mixer. (10)

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