JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2016

B. Tech 8th Semester (Electronics and Communication Engineering)

COURSE CODE: 11B1WEC232

MAX. MARKS: 15

COURSE NAME: Software Defined Radio

COURSE CREDITS: 03

MAX. TIME: 1 HR

Note: All questions are compulsory and each carries equal mark. Carrying of mobile phone during examinations will be treated as case of unfair means.

Q. 1 (a) What is the software defined radio? Distinguish it from the digital radio.

(b) Discuss all the factors those are expected to push-wider acceptance of the software defined radio.

Q. 2 (a) Explain step-wise design principle of the software defined radio.

(b) Draw the processing steps in the receiver RF front-end and discuss its potential objectives.

Q. 3(a) Draw the generic software radio RF receiver chain showing the benefits of software control.

(b) Discuss the characteristics of RF receiver front-end topologies.