JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST -1 EXAMINATION- Oct 2017
B.Tech VII Semester

COURSE CODE: 14B1WEC733   MAX. MARKS:15

COURSE NAME: Cognitive Radio Networks

COURSE CREDITS: 03   MAX. TIME: 1 Hr.

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

Q1. a) What are various components of cognitive radio? (2)

b) Describe various non-cooperative transmitter sensing techniques. (3)

Q2. a) Discuss sensing-throughput tradeoff problem in cognitive radio network. (2)

b) What is NeXt generation network? Give protocol stack structure for NeXt Generation network along with its architecture. (3)

Q3. Explain

(i) Spectrum white space

(ii) Cognitive Radio

(ii) Miss detection, false alarm and detection probabilities in cognitive radio.

(iv) Interference temperature

(v) IEEE 802.22 network specifications (5)

EC—8, BT