

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST-1 EXAMINATION- SEPTEMBER 2016
B. Tech VII Semester

COURSE CODE: 14B1WEC733

MAX. MARKS: 15

COURSE NAME: COGNITIVE RADIO NETWORKS

MAX. TIME: 1Hr

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

- Q. 1 a) Explain hypothesis model for spectrum sensing in cognitive radio. How false alarm and detection probability is defined under this model? Also provide their expressions. (3)
- b) Explain different functions of cognitive radio. (2)
- Q. 2 a) Discuss different types of non-cooperative sensing techniques in cognitive radio (3)
- b) What are different challenging issues in cognitive radio spectrum sensing? (2)
- Q. 3 Discuss IEEE 802.22 standard and its frame structure. How channel sensing is performed in IEEE 802.22? (5)