

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-1 EXAMINATION- February -2020

B. Tech. VIII Semester (ECE)

COURSE CODE: 14B1WEC733

MAX. MARKS: 15

COURSE NAME: Cognitive Radio Network

COURSE CREDITS: 03

MAX. TIME: 1 HRS

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

Q.1 (a) Discuss the various attributes, which must be employed in future generation of wireless networks. [CO1] [3]

(b) Explain Hidden Node Problem in wireless communication system. [CO1] [2]

Q.2 (a) What are the limitations of layered protocol stack structure in communication system? How these limitations can be overcome in cognitive radio communication system? [CO2] [3]

(b) What is the frequency range of ISM Band-1 and ISM Band-2? Also write down the usage of these bands. [CO2] [2]

Q.3 (a) How Software Defined Radio (SDR) is employed in next generation of communication system? What are the limitations of SDR? How it is different from Cognitive Radio? [CO2] [3]

(b) Write short note on Interference Temperature Model. [CO2] [2]