## BACHELOR OF TECHNOLOGY (C.B.C.S.) (2014 COURSE) B.Tech.Sem - VIII E & TC : WINTER- 2022 SUBJECT : SOFTWARE DEFINED RADIOS

Day : Monday Time : 02:30 PM-05:30 PM

Date: 28-11-2022 W-13377-2022 Max. Marks: 60

N.B. All questions are COMPULSORY. 1) Figures to the right indicate **FULL** marks. 2) Explain system level functional partitioning and digital frequency (10) Q.1 conversion partitioning. OR State and explain ideal software defined radio architecture. Differentiate between cascading digital converters and digital frequency (10)**Q.2** converters. OR Write down the transmitter and receiver requirements of RF Network design. **Q.3** What are the requirements of SDR for power processing? (10)OR Explain symbol rate and chip rate partitioning in detail. **Q.4** What are the software standards for software architecture? (10)OR Write a note on abstracted open software architecture. Write down various frameworks and platforms to implement software Q.5 defined radio network. OR Explain smart antenna architectures used for implementation of SDR. **Q.6** Explain system architecture and analog RF interface for software radio. (10)OR

Write down basic platform requirement for software radio.

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