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**Question Paper Code: 55S24**

Ph.D COURSE WORK EXAMINATION, NOV 2018

Elective

Course Work

15PCM524 – WIRELESS BODY AREA NETWORKS

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART - A (5 x 20 = 100 Marks)

1. (a) Design the Software and Hardware requirements of Berkley Motes. CO1- Ana (20)

Or

- (b) Design a Wireless Sensor Network (WSN) with 10 nodes configuration. CO1- Ana (20)

2. (a) Designate appropriate Frequency Bands for Medical Telemetry Systems. CO2- App (20)

Or

- (b) Apply suitable Frequency Bands which may best fit the requirements of Physiological Monitoring System. CO2- App (20)

3. (a) Give a Practical Guidelines for Architecting WSN Solutions for Healthcare. CO3- U (20)

Or

- (b) Give an overview of the key principles and general methodology used in the deployment of wireless sensor networks (WSNs) for healthcare problems. CO3- U (20)

4. (a) Discuss the effect of Radio Frequency signal on human tissues and organs. CO4- U (20)

Or

(b) Discuss the exposure of body tissues to Radio Frequency signal. CO4- U (20)

5. (a) How the testing methods developed at the European Telecommunications Standards Institute (ETSI) and how it can be applied to improve the quality of standards. CO5- U (20)

Or

(b) Explain the technologies expected for medical sensor network. CO5- U (20)

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