Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – April/May – 2017**

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| **Code :** | **14CS3051** | **Duration :** | **3hrs** |
| **Sub. Name :** | **WIRELESS SENSOR NETWORKS** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| Q. No. | Sub Div. | Questions | Course  Outcome | Marks |
| 1. | a. | Defend the requirement of various basic sensor network architectural elements and design principles for WSN in detail. | CO1 | 20 |
| (OR) | | | | |
| 2. | a. | Compare and Contrast the applications and the technical requirements for MANETs and WSN. | CO2 | 10 |
| b. | Discriminate category 1 and Category 2 WSN. | CO2 | 10 |
| 3. | a. | Identify the various wave propagation phenomena that affects the transmission and analyse its effect. | CO1 | 20 |
| (OR) | | | | |
| 4. | a. | Describe the hardware and software units of WSN. | CO1 | 20 |
| 5. | a. | Elaborate on the variants of Sensor Protocols for Information via negotiation. Justify how these protocols overcome the challenges in WSN. | CO2 | 20 |
| (OR) | | | | |
| 6. | a. | Analyse and assess the performance requirements of MAC protocol | CO2 | 20 |
| 7. | a. | Examine the feasibility of adapting TCP and UDP for WSN. Justify. | CO2 | 10 |
|  | b. | Elucidate on the working principle of PSFQ protocol? | CO2 | 10 |
| (OR) | | | | |
| 8. | a. | Explain in detail about the general middleware architecture for WSN. | CO3 | 20 |
|  | | **Compulsory:** |  |  |
| 9. | a. | Identify the metrics and critique on the evaluation of Wireless Sensor Networs. Summarize on the basic traffic models. | CO3 | 20 |

ALL THE BEST