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 :** | **14CS3018** | **Duration :** | **3hrs** |
| **Sub. Name :** | **MOBILE AD HOC 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. |  | Justify the issues that make the wireless sensor network, a distinct category of ad hoc networks ? | CO1 | 20 |
| (OR) | | | | |
| 2. |  | Identify the major issues that need to be considered while designing a MAC protocol for ad hoc wireless networks. | CO1 | 20 |
| 3. |  | Differentiate the two variants of the Floor acquisition Multiple Access (FAMA) protocol. | CO2 | 20 |
| (OR) | | | | |
| 4. |  | Identify a suitable application where the Receiver-Initiated Busy Tone Multiple Access (RI-BTMA) protocol can be utilized. Justify. | CO2 | 20 |
| 5. | a. | Highlight the advantages of reservation based MAC protocols over contention based MAC protocols. | CO1 | 10 |
|  | b. | Give application scenarios where contention-based, reservation based, and packet scheduling based MAC protocols can be used. | CO1 | 10 |
| (OR) | | | | |
| 6. |  | Identify some of the key issues involved in QoS routing in ad hoc networks. | CO1 | 20 |
| 7. |  | Differentiate Zone Routing protocol and Zone-Based Hierarchical link state routing protocol. | CO2 | 20 |
| (OR) | | | | |
| 8. |  | Sketch the INSIGNIA QoS framework and justify how it supports adaptive real time services. | CO2 | 20 |
|  | | **Compulsory**: |  |  |
| 9. |  | Differentiate the GSM and GPRS PLMNs architecture. | CO2 | 20 |

ALL THE BEST