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

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**End Semester Examination – Nov/Dec – 2018**

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| **Code :** | **14CS2014** | **Duration :** | **3hrs** |
| **Sub. Name :** | **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. | a. | Discuss about the challenges faced by adhoc mobile network in real time implementation for civilian applications. | CO1 | 15 |
| b. | Differentiate wireless adhoc network and wireless sensor network. | CO1 | 5 |
| (OR) | | | | |
| 2. | a. | Explain hidden terminal problem and exposed node problem in adhoc channel access. | CO1 | 15 |
| b. | Mention different parameters used to measure the performance of smart batteries. | CO1 | 5 |
|  |  |  |  |  |
| 3. |  | List different types of adhoc routing protocols. Explain Associativity based routing with its protocol description, route discovery phase and route deletion phase. | CO2 | 20 |
| (OR) | | | | |
| 4. | a. | Show the impact of impact of packet size, route length and beaconing interval on end-to-end delay performance and route reconfiguration time in adhoc network. | CO2 | 15 |
| b. | In an adhoc network, each node’s transmission range is 500m in radius, beaconing interval is once in every 15msec and migrating speed is 4.4m/s. Find the Associativity threshold. | CO2 | 5 |
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| 5. |  | List different versions of transmission control protocols. Explain each one in detail. | CO2 | 20 |
| (OR) | | | | |
| 6. | a. | Discuss about the importance of indirect-TCP and TCP Snoop in wireless last hop. | CO3 | 15 |
|  | b. | If source can reach the destination in 10 hops and processing delay at every intermediate node is 20microseconds. Find the end-to-end delay and round-trip-time. | CO2 | 5 |
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| 7. | a. | Classify the adhoc multicast routing protocols based on the delivery structures. | CO2 | 5 |
| b. | Illustrate the working of distance-vector multicast routing protocol. | CO2 | 15 |
| (OR) | | | | |
| 8. | a. | Explain the functioning of AODV multicast routing protocol with neat sketches. | CO2 | 15 |
| b. | Compare and contrast ODMRP and CAMP protocol. | CO2 | 5 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. |  | Describe the four components in associativity-based adhoc multicasting routing with neat diagrams. | CO2 | 20 |