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 :** | **14EC2042** | **Duration :** | **3hrs** |
| **Sub. Name :** | **ROUTING ALGORITHMS FOR WIRELESS MOBILE 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. | Enumerate dominating set based routing with example. | CO3 | 10 |
| b. | Describe any reactive protocol with diagram. | CO2 | 10 |
| (OR) | | | | |
| 2. | a. | Discriminate proactive and reactive protocols. | CO2 | 6 |
| b. | Differentiate between unicasting and multicasting. | CO1 | 4 |
| c. | Explain Geometric routing with an example. | CO2 | 10 |
| 3. | a. | Show with an example the working of Delaunay triangulation method. | CO3 | 8 |
|  | b. | Design a state diagram and explain the properties of self organized network. | CO3 | 12 |
| (OR) | | | | |
| 4. | a. | Enumerate Tree based routing with an example. | CO3 | 10 |
|  | b. | Illustrate how self configure or self organize is possible in a network. | CO2 | 5 |
|  | c. | Narrate the challenges involved in Self Organized Routing. | CO2 | 5 |
| 5. | a. | Explain energy efficient routing with example. | CO3 | 10 |
|  | b. | Discriminate Tree based from Mesh based protocols. | CO2 | 5 |
|  | c. | Name the features of Mesh based routing protocols. | CO3 | 5 |
| (OR) | | | | |
| 6. | a. | Draw the flowchart for load balancing. | CO2 | 8 |
|  | b. | With an example show the working of ring based routing. | CO3 | 8 |
|  | c. | Compare Cellular and Ad hoc Wireless Networks. | CO2 | 4 |
| 7. | a. | Enumerate signal based clustering with an example. | CO3 | 10 |
|  | b. | Explain directed and non directed graphs with examples. | CO1 | 10 |
| (OR) | | | | |
| 8. | a. | Describe any clustering approach routing protocol with diagram. | CO3 | 10 |
|  | b. | Narrate the challenges involved in Graphs-Subgraphs-topology. | CO2 | 10 |
|  | | **Compulsory:** |  |  |
| 9. | a. | Enumerate RNG-LMST- DLEDSR. | CO2 | 10 |
|  | b. | Elaborate transmission range based topology with diagrams. | CO2 | 10 |

ALL THE BEST