



**R20**

Code No:873AF

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**MCA III Semester Examinations, March/April - 2022**

**AD-HOC AND SENSOR NETWORKS**

**Time: 3 Hours**

**Max.Marks:75**

**Answer any five questions  
All questions carry equal marks**

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- 1.a) What are the important characteristics of Mobile ad hoc networks (Manets)?  
b) What are the important applications of Manets? [8+7]
- 2.a) Illustrate the working of AODV routing protocol for Manets.  
b) Explain about DSR algorithm. [7+8]
- 3.a) Write about Jitter and RDT, the design considerations of Broadcast protocol.  
b) Write about Probability-based solutions for Broadcasting. [8+7]
- 4.a) Write about MAODV protocol with an illustration.  
b) Explain about AMRoute and MCEDAR. [8+7]
- 5.a) Distinguish Geocast routing from broadcast and multicast. Give the classification of geocast solutions for Manets.  
b) Write about GeoGRID geocast protocol for Manets. [8+7]
- 6.a) Distinguish the solutions for TCP over ad hoc link-TCP-F and ELFN  
b) What is Capture effect over TCP? Give one solution for the same. [8+7]
- 7.a) Write about Directed Diffusion routing protocol for WSNs.  
b) Illustrate the concept in LEACH protocol with the formula for CH selection. [7+8]
- 8.a) What is the need for in-network processing in WSNs? Explain the related mechanisms for the same.  
b) Explain the concepts for adapting to dynamic nature of wireless sensor networks. [8+7]

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