

Code : 20IT3101

**B.TECH. DEGREE EXAMINATION, MODEL PAPER, 2023**  
**III B.Tech. I Semester**

**WIRELESS AND ADHOC NETWORKS**

(Artificial Intelligence & Data Science)

Time : 3 hours

Max. Marks: 60

*Answer SIX Questions, Choosing ONE Question from each section*  
*All Questions carry equal marks*

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**SECTION – I**

- 1 (a) Describe about the various characteristics of the Wireless Channel.
- (b) Explain various multiple access techniques with suitable examples.
- 2 (a) What is modulation? Explain various modulation techniques.
- (b) Explain in detail about various IEEE 802 standards.

**SECTION – II**

- 3 Explain in detail about the various generations of cellular networks.
- 4 (a) Write in brief about IEEE 802.16.
- (b) Describe in detail about HIPERACCESS.

**SECTION – III**

- 5 (a) Distinguish between Cellular and Adhoc wireless networks.
- (b) Write in brief about the TCP in Wireless Domain.
- 6 (a) Explain about Mobile IP.
- (b) What are the various issues in Adhoc wireless networks?

**SECTION – IV**

- 7 (a) What are the Issues and Challenges in providing QoS in Ad Hoc Wireless Networks?
- (b) Explain about various MAC layer solutions.
- 8 Discuss briefly about QoS Frameworks for Ad Hoc Wireless Networks.

**SECTION – V**

- 9 Enumerate various Battery Management Schemes.
- 10 Explain in detail about various transmission power management schemes.

**SECTION – VI**

- 11 Write in brief about Ultra wide band radio communication.
- 12 Explain with a neat sketch the Meghadoot Architecture.