

Module 1: Introduction to Mobile Computing

Explain Spread Spectrum (DSSS & FHSS) | - Mc1 (2021): Q5a

"What is spread spectrum? Why is it used? Explain any one of the spread spectrum techniques." | - Mc13 (2023): Q2a

Hidden & Exposed Station Problem | - Mc1 (2021): Q1c

"What is Hidden and Exposed station problem? How they can be avoided." | - Mc13 (2023): Q3a

Signal Propagation Effects | - Mc12 (2022): Q3b

"Explain Signal Propagation in detail. What are various Signal Propagation Effects?" |

Module 2: GSM Mobile Services |

GSM System Architecture | - Mc13 (2023): Q3b

"Explain GSM System Architecture in detail with a diagram." | - Mc12 (2022): Q2c
| - Mc1 (2021): Q3a

Handover Mechanisms in GSM | - Mc1 (2021): Q3a

"What are the different Handover mechanisms in GSM? Explain each handover mechanism in brief." | - Mc13 (2023): Q4a

GPRS Architecture | - Mc1 (2021): Q4a

"Explain GPRS architecture, explain each block in detail." | - Mc12 (2022): Q1b

GSM Security (A3, A5, A8) | - Mc13 (2023): Q4b

"List various Security services offered by GSM. Explain A3, A5, and A8 Algorithm in brief." |

Module 3: Mobile Networking |

Mobile IP Packet Delivery | - Mc1 (2021): Q6a

"Explain the mechanism for IP packet delivery using Mobile IP." | - Mc12 (2022): Q3a
| - Mc13 (2023): Q5a

Snooping TCP vs. Mobile TCP | - Mc1 (2021): Q4b

"Explain snooping TCP and mobile TCP with their merits and demerits." | - Mc12 (2022): Q5a
| - Mc13 (2023): Q6e

Tunneling & Encapsulation | - Mc13 (2023): Q5b

"Explain Tunneling and Encapsulation in brief. What are the various types of Encapsulation techniques?" | - Mc12 (2022): Q6a

Module 4: Wireless LANs |

Bluetooth Protocol Stack | - Mc12 (2022): Q6b

"Draw a neat sketch of Bluetooth protocol Stack and explain the same." | - Mc13 (2023): Q6a

Wi-Fi Security Protocols | - Mc1 (2021): Q6b

"Discuss in detail about Wi-Fi security protocol." |

Module 5: Mobility Management |

Cellular IP (Micro Mobility) | - Mc1 (2021): Q2b

"What is the need of Micro Mobility? Explain Cellular IP in detail." |

Module 6: LTE & 5G |

Compare Mobile Generations (1G-5G) | - Mc12 (2022): Q1a

"Compare all Mobile Generations i.e. 1G, 2G, 3G, 4G, and 5G." | - Mc1 (2021): Q1b

LTE vs. LTE-Advanced | - Mc1 (2021): Q1b

"Compare LTE and LTE Advanced." |

Self-Organizing Networks (SON) | - Mc1 (2021): Q2a

"What do you mean by Self Organizing Networks? Explain the architecture of SON." |

Most Repeated Numerical/Conceptual Questions

Frequency Reuse with Clustering | - Mc1 (2021): Q1a

"Explain the concept of frequency reuse with clustering." |

Small Cells in Cellular Systems | - Mc13 (2023): Q2b

"What are various Advantages and Disadvantages of Small Cells in Cellular system?" |