REFERENCE BOOKS:

1. **GSM: Evolution towards 3rd Generation Systems**, (Editor), Z. Zvonar Peter Jung, Karl Kammerlander Springer; 1st edition 1998
2. **GSM & UMTS: The Creation of Global Mobile Communication**, Friedhelm Hillebrand, John Wiley & Sons; 2001.

ADHOC WIRELESS NETWORKS

Subject Code	: **10EC844**	IA Marks	: 25
No. of Lecture Hrs/Week	: 04	Exam Hours	: 03
Total no. of Lecture Hrs.	: 52	Exam Marks	: 100

UNIT - 1

AD HOC NETWORKS: Introduction, Issues in Ad hoc wireless networks, Ad hoc wireless internet.

UNIT - 2

MAC PROTOCOLS FOR AD HOC WIRELESS NETWORKS: Introduction, Issues in designing a MAC protocol for Ad hoc wireless Networks, Design goals of a MAC protocol for Ad hoc wireless Networks, Classification of MAC protocols.

UNIT - 3

Contention - based MAC protocols with scheduling mechanism, MAC protocols that use directional antennas, Other MAC protocols.

UNIT - 4

ROUTING PROTOCOLS FOR AD HOC WIRELESS NETWORKS: Introduction, Issues in designing a routing protocol for Ad hoc wireless Networks, Classification of routing protocols, Table drive routing protocol, On-demand routing protocol.

UNIT - 5

Hybrid routing protocol, Routing protocols with effective flooding mechanisms, Hierarchical routing protocols, Power aware routing protocols.

UNIT - 6

TRANSPORT LAYER PROTOCOLS FOR AD HOC WIRELESS NETWORKS: Introduction, Issues in designing a transport layer protocol

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for Ad hoc wireless Networks, Design goals of a transport layer protocol for Ad hoc wireless Networks.

UNIT - 7

SECURITY: Security in wireless Ad hoc wireless Networks, Network security requirements, Issues & challenges in security provisioning.

UNIT - 8

QUALITY OF SERVICE IN AD HOC WIRELESS NETWORKS: Introduction, Issues and challenges in providing QoS in Ad hoc wireless Networks, Classification of QoS solutions.

TEXT BOOK:

1. **"Ad hoc wireless Networks"**, C. Siva Ram Murthy & B. S. Manoj, Pearson Education, 2nd Edition, reprint 2005.

REFERENCE BOOKS:

1. **"Ad hoc wireless Networks"**, Ozan K. Tonguz and Gianguigi Ferrari, Wiley
2. **"Ad hoc wireless Networking"**, Xiuzhen Cheng, Xiao Hung, Ding-Zhu Du, Kluwer Academic publishers.

OPTICAL COMPUTING

Subject Code	: **10EC845**	IA Marks	: 25
No. of Lecture Hrs/Week	: 04	Exam Hours	: 03
Total no. of Lecture Hrs.	: 52	Exam Marks	: 100

UNIT - 1

MATHEMATICAL AND DIGITAL IMAGE FUNDAMENTALS: Introduction, Fourier Transform, discrete Fourier transform, basic diffraction theory, Fourier transform property of lens , sampling and quantization, image enhancement, image restoration.

UNIT - 2

LINER OPTICAL PROCESSING: Introduction, photographic film, spatial filtering using binary filters, holography, inverse filtering, Deblurring.

UNIT - 3

ANALOG OPTICAL ARITHMETIC: Introduction, Halftone processing, nonlinear optical processing, Arithmetic operations.