Roll No. .....]

B. Tech CS (Cyber Forensic) IV Semester (Regular & Ex.)

End-Term Examination, May-June-2022

WIRELESS AND MOBILE COMMUNICATIONS

(CSL0463)

Time: 03:00 hours

Max. Marks: 40

Note : Attempt all questions.

1.1 List the applications of wireless network. 1

1.2 Draw and explain OSI reference model. 2

Or

Draw and Explain TCP/IP layered model.

1.3 How DSSS support spread spectrum technique and what makes it so effective in digital based system. 3

Or

Write a detailed note on FHSS with mentioning the transmitter and receiver diagram.

2.1 Expand SIM. 1

2.2 Explain the concept of "FREQUENCY REUSE" as applied to Cellular Communications. How it support cell splitting. 2

Or

Draw the cell network architecture.

2.3 Discuss the factors affecting small scale fading. 3

Or

Mention the types of fading and explain the frequency selective fading.

3.1 List the performance characteristics of GSM. 1

3.2 Describe the GSM elements and interfaces. 2

Or

How handover decision made in GSM

3.3 With diagram explain functioning and components of GSM NSS subsystem and interfaces used in it. 3

Or

Explain how mobile terminated and mobile originated calls are handled in GSM.

4.1 List all mobile communication technology according to IEEE. 1

4.2 Explain advantages and disadvantages of wireless LAN. 2

Or

Draw the IEEE 802.11 ad-hocarchitecture.

4.3 What is a piconet ? explain how it is form in Bluetooth communication? 3

Or

Explain MANET. Why ad-hoc networks are needed?

5.1 Why WAP standard used explain? 1

5.2 List the advantages of mobile web apps. 2

Or

What is a smart phone explain?

5.3 Write a note on mobile operating systems. 3

Or

Explain Android architecture.

6.1 Explain the FDMA, TDMA,CDMAmultiple access techniques for wireless communication system. 5

Or

What makes VSAT system so effective in remote areas, what are its components?

6.2 Explain how Handoff is achieved in Cellular Mobile Communication Systems and the concept on inter system handoff. Also explain MAHO. 5

Or

Explain GPRS architecture and interfaces in detail.
