

C 44419

(Pages 2)



**SEVENTH SEMESTER B.TECH. (ENGINEERING) DEGREE
EXAMINATION, JUNE 2013**

IT 09 L21—BLUETOOTH TECHNOLOGY

(2009 Scheme – Supplementary)

Time : Three Hours

Maximum : 70 Marks

Part A

Answer all questions.

1. (a) What is Bluetooth S1G ?
- (b) How secure a Bluetooth device is ?
- (c) What is paring ?
- (d) How many devices can communicate concurrently ?
- (e) Name few applications of Bluetooth.

(5 × 2 = 10 marks)

Part B

Answer any four questions.

- II. (a) Explain the physical layer of Bluetooth.
- (b) Will other RF (Radio Frequency) devices interfere with Bluetooth devices-Justify.
- (c) Explain the user's scenarios of Bluetooth transmission and list the services offered by the Bluetooth.
- (d) Explain the range of Bluetooth transmitter and receivers.
- (e) Briefly explain the type of encryption used for Bluetooth security.
- (f) Explain the format of the Bluetooth device address.

(4 × 5 = 20 marks)

Part C

Answer all questions.

- III. (a) Explain with neat diagram Bluetooth protocol Architecture.

Or

- (b) Explain how Generic Access Profile (GAP) is used for Bluetooth device discovery and connection establishment.

- IV. (a) Explain the security architecture of Bluetooth devices.

Or

- (b) Briefly explain the need for an antenna along with its types.

Turn over

V. (a) Explain the notable aspects of connection establishment together with modes of connection.

Or

(b) Explain about the challenge-response scheme used for authentication in Bluetooth devices.

VI. (a) Explain the Service Discovery Application Profile (SDAP) and Serial Port Profile (SSP).

Or

(b) Explain in detail the Bluetooth usage models.

(4 × 10 = 40 marks)