

B. TECH.**THEORY EXAMINATION (SEM–VIII) 2016-17**
WIRELESS & MOBILE COMMUNICATION**Time : 3 Hours****Max. Marks : 100****Note : Be precise in your answer. In case of numerical problem assume data wherever not provided.****SECTION – A**

- 1. Attempt all parts of the following questions:** **10 x 2 = 20**
- (a) If $I = 3$ and $J = 0$ What is the cluster size in cellular system.
 - (b) What is mean by frequency reuse?
 - (c) Define Brewster angle?
 - (d) What is Handoff?
 - (e) Mention two services aspects in IS 95
 - (f) What are the signalling features in GSM.
 - (g) What is the reason behind the name -Bluetooth?
 - (h) Give two examples for Wi- Fi technology?
 - (i) What is demerit of ad hoc network?
 - (j) What are the three main wireless technologies?

SECTION – B

- 2. Attempt any five of the following questions:** **5 x 10 = 50**
- (a) Explain the different type of channel assignment strategies.
 - (b) Explain the different type of diversity technique used in wireless communication system.
 - (c) Explain the term Evolution of mobile radio communication fundamentals.
 - (d) Why Next Generation Network are important & Explain the Next Generation Network in detail.
 - (e) Explain Mobile AD –HOC Network in wireless communication
 - (f) Draw and explain the Rake Receiver in detail using proper block diagram
 - (g) Explain the frequency hopped multiple access & code division multiple access technology.
 - (h) Explain the different type of fading in wireless communication.

SECTION – C

- Attempt any two of the following questions:** **2 x 15 = 30**
- 1.** Explain the different type of vocoders in wireless communication.
 - 2.** Explain the different type of equalization techniques used in wireless communication.
 - 3.** Explain the term GSM in detail in mobile radio communication using system architecture