Roll No. | | | | | | | | | | | | |

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (Electrical & Electronics Engineering) (Sem.–7)

WIRELESS COMMUNICATION

Subject Code : BTEEE-804F

M.Code : 71968

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. Write briefly :

a. Define coherence time and coherence bandwidth.

b. Why GMSK is preferred for multiuser, cellular communication?

c. Define spatial diversity.

d. When is the PN sequence called as maximal length sequence?

e. List the types of FH-SS.

f. How the capacity can be increased in CDMA?

g. What are the services offered by GSM?

h. What is wi-fi technology?

i. Define SS7.

j. Define pure ALOHA.

SECTION-B

2. What are the factors influencing small scale fading?

3. Explain the diversity analysis for maximum ration combining aspect of receiver.

4. Devise the 4G visions and give the comparison of key parameters of 4G with 3G.

5. With diagram explain Personal Access Communication system.

6. Discuss about the technical challenges faced by the wireless communication.

SECTION-C

7. Explain with diagram, the different techniques available for signal combining.

8. Discuss the design issues of IEEE 802.11 and also provide the working of BDS, DS and ESS networks.

9. Explain the functional architecture of PACS.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.