

SV - 465

Seat No.	
----------	--

Total No. of Pages : 2

**B.E. E & TC (Semester - VII) (Revised) Biotechnology Engineering
Examination, May - 2018
WIRELESS COMMUNICATION
Sub. Code : 47927**

Day and Date : Saturday, 19 - 05 - 2018

Total Marks : 100

Time : 02.30 p.m. to 05.30 p.m.

- Instructions:
- 1) All questions are compulsory.
 - 2) Assume suitable data if necessary.
 - 3) Figure to the right indicate full marks.

SECTION - I

Q1) Solve any two **[2 × 8 = 16]**

- a) Explain 3G wireless networks.
- b) What is WLL? Explain it in detail.
- c) Explain diffraction and scattering in mobile radio propagation.

Q2) Solve any two **[2 × 8 = 16]**

- a) Derive the equation for free space propagation model.
- b) Explain in detail types of small scale fading based on multipath time delay spread.
- c) Explain statistical model for multipath fading channel.

Q3) Write short note on any three **[3 × 6 = 18]**

- a) Large scale path loss.
- b) 2G & 3G networks.
- c) Rayleigh fading distribution.
- d) Fading effects due to doppler spread.

P.T.O.

SECTION - II

Q4) Solve any two

[2 × 8 = 16]

- a) Compare TDMA, FDMA & COMA techniques.
- b) Explain any two spread spectrum multiple access techniques.
- c) Explain in detail cellular digital packet data.

Q5) Solve any two

[2 × 8 = 16]

- a) Explain in detail cellular packet switched architecture.
- b) Explain DECT functional concept.
- c) Explain personal access communication system.

Q6) Write short note on any three

[3 × 6 = 18]

- a) X-25 protocol
- b) Difference between wireless and fixed telephone networks
- c) IEEE 802.11 standards.
- d) GSM

