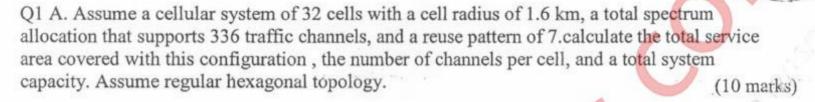
15-12-2016 QP CODE: 814502

3 Hours

[80 marks]

Note: 1. Question number 1 is compulsory.

- 2. Solve any three questions out of the remaining five questions
- 3. Assume suitable data if necessary
- 4. Figure indicate marks



- B. Explain the main factors of change in economics of wireless technology. (10 marks)
- Q2 A. Define piconet and scatternet. Explain Bluetooth protocol stack structure. (10 marks)
 B. Explain WIMAX system and compare the different 802.16 standards. (10 marks)
- Q3 B. Explain GPRS architecture and explain how authentication and encryption is provided in GSM (10 marks)
 - B. Explain 802.11 MAC management functions. Explain in detail Power Management function with a neat diagram. (10 marks)
- Q4 A. Write short note on wireless sensor networks (05 marks)
 - B. Explain Hidden and exposed terminal problem with solution. (05 marks)
 - C. Why is the concept of Spread Spectrum important? Briefly explain FHSS and DSSS concept. (10 marks)
- Q5 A. With a neat diagram explain Electromagnetic Spectrum. List the advantages and disadvantages of wireless technology. (10 marks)
 - B. Neatly explain the WLL Architecture. Explain the two local loop techniques with diagram. (10 marks)
- Q6 Write short notes on (any 2):

(20 marks)

- a. VPN
- b. Multiple Access Techniques
- c. Handoff Strategies
- d.. Mobile IP