

EC - 8011

B.E. VIII Semester Examination, June 2015  
Advanced Data Networks (Elective-II)

*Time: Three Hours*

[www.rgpvonline.in](http://www.rgpvonline.in)

*Maximum Marks: 70*

*Note:* i) All questions carry equal marks.

ii) Assume suitable data if required.

iii) Attempt one question from each unit.

**Unit -1**

1. a) What is cellular system? What are the topologies used for cellular systems? 7
- b) What are the techniques used for mobility management in wireless networks? Describe any one in brief. 7

OR

2. a) What are the methods for power management in Cellular networks? Explain any one of them. 7
- b) What are the security issues in Wireless communication? How to overcome them? 7

**Unit-II**

3. a) What is Cellular Digital Packet Data (CDPD) network? Write advantages of CDPD. 7
- b) Draw and explain the GPRS reference architecture. 7

OR

4. a) Explain the IEEE standards used for wireless LAN. Write the advantages and disadvantages of wireless LAN compared to wired LAN. 7
- b) Name and explain the five major challenges for implementing WLANs that existed from the beginning of this industry. 7

**Unit-III**

5. a) Explain the architecture and services of IEEE 802.11 standard. 7
- b) What is the difference between MAC protocol of the Bluetooth and the IEEE 802.11? 7

OR

6. a) Write a short note on HIPERLAN-II. 7
- b) Explain the basic architecture of Geolocation system. How performance is measured? 7

**Unit-IV**

7. a) Explain the difference between Piconets and scatternets with reference to this explain the architecture of 'Bluetooth'. 7
- b) What is GPS system? Write and explain the principles of GPS position locationing. 7

OR

8. a) Discuss Optical Add/ Drop Multiplexing OADM. What is reconfigurable OADM? 7
- b) Differentiate optical packet switching and optical burst switching. 7

**Unit-V**

9. Write short notes on any Two: 14
- a) SONET/SDH b) Differential GPS. c) Wireless home networking d) Wave length conversion.