

B. Tech. Sem - VIII (Electronics) (2014 COURSE) (CBCS) :

WINTER - 2018

SUBJECT: → WIRELESS NETWORK

Day : Thursday
Date : 15/11/2018

W-2018-2638

Time: 02.30 PM TO 05.30 PM
Max. Marks: 60

N. B. :

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labeled diagram **WHEREVER** necessary.
- 4) Assume suitable data, if necessary.

Q. 1 Explain in detail multipath effect in mobile communication? **(10)**

OR

Explain :

- i)** Evolution of next – generation networks **(05)**
- ii)** Multipath effects in mobile communication **(05)**

Q. 2 Write short notes on: **(10)**

- i)** Capacity building
- ii)** Blocking probability

OR

What do you mean by cellular communication? Explain cellular terminology in details. **(10)**

Q. 3 Draw and explain: **(10)**

- i)** Air interface
- ii)** GSM multiple access scheme

OR

Define GSM. Explain GSM call set up procedure. **(10)**

Q. 4 a) What are the issues in CDMA network planning? **(05)**

b) Explain incentives for power control in a CDMA network. **(05)**

OR

Write short note on:

- i)** RAKE Receiver **(05)**
- ii)** Multipath diversity **(05)**

Q. 5 a) What is the UMTS? List importance features of the UMTS air interface. **(05)**

b) Explain IMT – 2000 standards. **(05)**

OR

a) Discuss the principle of GPRS. How is data transfer handled in GPRS architecture? **(05)**

b) Mention the features and challenges of 4G. **(05)**

Q. 6 a) Draw a sketch and explain the basic architecture of WATM. **(05)**

b) Discuss the overall architecture of home RF system. **(05)**

OR

a) What are the functions of home and foreign agents in the mobile IP protocol? **(05)**

b) Compare the usefulness of WLANs, WPANs and WMANs. **(05)**

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