

# KADI SARVA VISHWAVIDYALAYA

B.E SEMESTER VII EXAMINATION (Nov-2016)

SUBJECT CODE: CE 702

SUBJECT NAME: NEXT GENERATION NETWORK

DATE: 10/11/2016

TIME: 10:30 am to 01:30 pm

TOTAL MARKS: 70

## Instructions:

1. Answer each section in separate Answer sheet.
2. Use of scientific Calculator is permitted.
3. All Indicate **clearly**, the options you attempted along with its respective question number
4. Use the last page of main supplementary for rough work

## SECTION-1

- Q-1 All Compulsory
- Q-1 (A) Describe the following networks with example. 05  
(a) Wired Network (b) Wireless Network (c) Ad hoc Network
- Q-1 (B) Write a brief note on: 05  
(a) Client context manager (b) CC/PP (c) Policy manager (d) Security manager  
(e) P3P
- Q-1 (C) Explain the differences between 1G, 2G, 2.5G and 3G mobile 05  
communications.

**OR**

- Q-1 (C) Explain about indirect & snooping TCP. Also give any two advantages of 05  
mobile TCP.

- Q-2 Answer the following Questions

- Q-2 (A) Explain following protocol used in the Bluetooth technology 05  
1. Link Manager Protocol.  
2. Logical Link Control and Adaptation Protocol.  
3. RFCOMM
- Q-2 (B) What are HLR and VLR? Describe its functions in call routing and roaming. 05

**OR**

- Q-2 (A) What is active RFID? Describe two applications of active RFID. How is active 05  
RFID different from passive RFID? Describe two applications of passive  
RFID.
- Q-2 (B) What is handover/handoff? How is handoff different from roaming? 05

- Q-3 Answer the following Questions

- Q-3 (A) Explain the GPRS system architecture with figure. 05
- Q-3 (B) What is the difference between SM-MT and SM-MO? Explain both in detail. 05



OR

- |     |     |  |    |
|-----|-----|--|----|
| Q-3 | (A) | Explain data services in GPRS?   | 05 |
| Q-3 | (B) | What are various strengths of SMS? Explain all of them. Also, state what are the applications areas where these strengths can be used? | 05 |

**SECTION-2**

Q-4 All Compulsory

- |     |     |   |    |
|-----|-----|---|----|
| Q-4 | (A) | Describe what are the limitations and applications of GPRS? | 05 |
| Q-4 | (B) | Explain GPRS data link layer and GPRS physical layer.       | 05 |
| Q-4 | (C) | Mention some of the advantages and disadvantages of WLANS?  | 05 |

OR

- |     |     |  |    |
|-----|-----|--|----|
| Q-4 | (C) | Explain wireless LAN infrastructure and ad hoc mode with figure. | 05 |
|-----|-----|--|----|

Q-5 Answer the following Questions

- |     |     |  |    |
|-----|-----|--|----|
| Q-5 | (A) | Explain wireless LAN security in detail. | 05 |
| Q-5 | (B) | Compare Wifi Vs. 3G.                     | 05 |

OR

- |     |     |                                    |    |
|-----|-----|------------------------------------|----|
| Q-5 | (A) | Explain types of wireless LAN.     | 05 |
| Q-5 | (B) | Explain wireless LAN applications. | 05 |

Q-6 Answer the following Questions

- |     |     |                                     |    |
|-----|-----|-------------------------------------|----|
| Q-6 | (A) | Compare CDMA Vs. GSM.               | 05 |
| Q-6 | (B) | Explain voice over IP applications. | 05 |

OR

- |     |     |   |    |
|-----|-----|---|----|
| Q-6 | (A) | What is VoIP? Compare H.323 and SIP.                        | 05 |
| Q-6 | (B) | Explain session initiation protocol architecture in detail. | 05 |

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# KADI SARVA VISHWAVIDHYALAYA

## B.E. Semester VII Examination – Nov. – 2015

SUBJECT NAME & CODE: NEXT GENERATION NETWORKS CE-702

DATE: 24/11/2015

TIME: 10.30 AM to 1.30 PM

TOTAL MARKS: 70

### Instructions:

- 1 Answer each section in separate answer sheet.
- 2 Use of scientific calculator is permitted.
- 3 All questions are **Compulsory**.
- 4 Indicate **clearly**, the options you attempt along with its respective question number.
- 5 Use the last page of main supplementary for **rough work**.

### SECTION – I

Q-1

- A. Draw the Bluetooth protocol stack and explain core protocols. 5
- B. What is handover/handoff? How handoff is different from roaming? 5
- C. List and explain the strengths of SMS. 5

**OR**

- C. Explain Physical and Logical architecture of wireless Communication. 5

Q-2

- A. Explain the Multiple Access Techniques used to access the channel by mobile subscriber. 5
- Time Division Multiple access.
  - Code Division Multiple access.

- B. Explain tunneling and encapsulation in mobile IP. 5

**OR**

- A. What is the difference between SM-MT and SM-MO? Explain. 5

- B. List out GSM Specification and explain functional architecture of GSM. 5

Q-3

- A. Differentiate active and passive RFID with diagrams. 5

- B. Write short note on: 1G, 2G, 2.5G and 3G mobile communications. 5

**OR**

- A. Compare and contrast WiMAX and WiFi technologies. 5

- B. Explain Abstract Mobility Management Model. 5

Cont..

## SECTION – II

Q-4

- A. Explain the GPRS functional architecture and application. 5
- B. Give six functions where CDMA is different from GSM. 5
- C. Explain Wireless LAN standards and its architecture. 5

OR

- C. Explain classical TCP improvements and snooping TCP. 5

Q-5

- A. What are different elements in VoIP architecture? Discuss the role of such elements. 5
- B. What is CDMA technology? Explain the Direct Sequence Spread Spectrum Techniques. 5

OR

- A. Describe Wired, Wireless & Ad-hoc networks. 5
- B. Describe the WAP protocol stack while enumerating the functions of different layers. 5

Q-6

- A. Explain MMS architecture and transaction flow in MMS. 5
- B. Discuss the difference between H.323 and SIP. 5

OR

- A. Describe IPV6 in detail. 5
  - B. Answer the following questions. 5
    1. IPv6 Security
    2. Limitations of GPRS
    3. IMEI
    4. OSS
    5. NSS
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