

Hall Ticket Number:

--	--	--	--	--	--	--	--	--

III/IV B.Tech (Supplementary) DEGREE EXAMINATION

November, 2019

Sixth Semester

Time: Three Hours

Information Technology

Wireless Networks

Maximum : 60 Marks

Answer Question No.1 compulsorily.

(1X12 = 12 Marks)

Answer ONE question from each unit.

(4X12=48 Marks)

(1X12=12 Marks)

1 Answer all questions

- List various mobile and wireless devices.
- Draw the radiation pattern of a simple dipole.
- What is frequency division multiplexing?
- Draw the frame structure of TETRA.
- Which numbers play a major role in locating a mobile station?
- List the applications of satellites in the context of mobile communications.
- What are the disadvantages of infrared technology?
- What is reverse tunnelling?
- How can DHCP be used for mobility and support of mobile IP?
- Why slow start mechanism fails in mobile IP?
- List the operations of PUSH access protocol.
- Which WTP class reflects the typical web access?

UNIT I

- Describe the history of wireless communications. 6M
 - Explain the functions of each layer of OSI reference model in a wireless and mobile environment. 6M

(OR)

- Discuss various signal propagation effects. 6M
 - With suitable examples explain CDMA system. 6M

UNIT II

- Draw the basic architecture of the UTRA network and explain. 8M
 - Describe the two basic classes of UMTS handovers. 4M

(OR)

- What characteristics do the different satellite orbits have? What are the pros and cons? 6M
 - Draw the DAB frame structure and components of a DAB sender. 6M

UNIT III

- Explain the functions of Bluetooth baseband, link manager and logical link control & adaptation protocols. 8M
 - Draw the basic structure of HiperLAN2 MAC frames. 4M

(OR)

- Discuss the requirements, entities and terminology of mobile IP. 6M
 - Write about IP-in-IP encapsulation and minimal encapsulation techniques. 6M

UNIT IV

- How Indirect TCP increases TCP's performance in wireless and mobile environment? 6M
 - Describe the functionality of snooping TCP. 6M

(OR)

- Draw and explain the WAE logical model. 6M
 - Illustrate the WTA functionality. 6M

