First Term Examination

Eighth Semester [B.Tech.]- March, 2020

Paper Code: ETIT-402   **Subject:** Mobile Computing

Time: 1.30Hrs.   **Maximum Marks:** 30

Note: Q. No. 1 is compulsory and attempt any two more questions from the remaining.

Q.No. 1 (a)   What is zero generation?

(b)   Differentiate between Tunneling and Reverse Tunneling?

(c)   Define IMSI and IMEI?

(d)   What is Umbrella Cell?

(e)   Why Uplink frequencies are always selected as the lower range of band than downlink frequencies.

[2X5=10]

Q.No. 2(a)   Why frequency reuse concept plays major role in Mobile communication? List two major advantages of Cellular Concept.   [5]

(b)   Explain different types of handoff's with the help of diagram.   [5]

Q.No. 3(a)   Explain hidden terminal problem. How it is controlled in IEEE 802.11?   [5]

(b)   Explain Bluetooth architecture with the help of diagram.   [5]

Q. No. 4   Write short notes on **any two** of the following: [2x5]

(a)   ZigBee Technology

(b)   WAP Protocol

(c)   Wi-Max Technology

(d)   WPABX

END TERM EXAMINATION

EIGHTH SEMESTER [B.TECH] SEPTEMBER-OCTOBER 2020

Paper Code: ETIT-402 **Subject: Mobile Computing**

(Batch-2013 Onwards)

Time: 2 Hours **Maximum Marks :75**

Note: Attempt three questions in all including question no.1 which is compulsory. Internal choice is indicated.

Q1 Attempt **any five** following in brief: (5x5=25)
  (a) Differentiate between tunnelling and reverse tunnelling.
  (b) Difference between HLR and VLR.
  (c) Explain WAP Architecture in Brief.
  (d) What is HiperLan?
  (e) What are modifications required for GPRS support on GSM Network.
  (f) Explain Piconet and Scatternet in Bluetooth with Diagrams.
  (g) Why is shape of cell Hexagonal?

UNIT-I

Q2 (a) What is handoff in Cellular Systems. Explain different types of hand offs. (12.5)
  (b) Mention Multiple access technologies used in 1G, 2G, 3G, 4G and 5G. (12.5)

OR

Q3 (a) Draw Mobile Computer architecture with GPRS support for a Mobile Device. (12.5)
  (b) Explain WAP proxy and WAP gateway with respect to WAP Architecture. (12.5)

UNIT-II

Q4 (a) Explain Location Management in mobile networks. (12.5)
  (b) Explain three applications of Bluetooth in detail. (12.5)

OR

Q5 (a) Explain DSDV and DSR. (12.5)
  (b) Explain Wireless Mark-up Language in detail. (12.5)

UNIT-III

Q6 (a) Discuss Mobile IP. What are modifications in TCP for Mobile environment? (12.5)
  (b) Explain ZigBee protocol for communication. (12.5)

OR

Q7 (a) What are Advantages and Disadvantages of IrDA. (12.5)
  (b) What is importance of frequency reuse scheme explain with Diagram. (12.5)

UNIT-IV

Q8 (a) Describe Dynamic Host Configuration Protocol for Wireless Communication. (12.5)
  (b) Explain Advantages and Disadvantages of Indirect TCP and Snooping TCP. (12.5)

OR

Q9 (a) Explain Quality of Service in 3G. (12.5)
  (b) Compare Pure ALOHA and Slotted ALOHA. Use suitable diagram to explain the difference. (12.5)

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