Total No. of Question : [4]   **Registration No. :** | | | | | | | | |

Programme Name : Bachelor of Electronics and Telecommunication Engineering
Regular B.Tech.Final Year (A.Y.2023-24) ESE Sem. VII Nov.2023
VII SEMESTER (2020 BATCH)
201ETL402-Advanced Mobile Communication(TH)

Duration : [02:00 PM - 04:00 PM]
Date : 23 Nov, 2023
Day : Thursday

Marks : 50

Instructions :

(Q1) **All Questions are compulsory**   [20.0]

(1.1) Explain with diagrammatic illustration of reflection, diffraction and scattering.   [6.0]

CO :- CO1, CO2
Blooms Taxonomy :- Remember, Evaluate

(1.2) Explain mobile ad-hoc networks in detail.   [7.0]

CO :- CO1, CO2
Blooms Taxonomy :- Remember, Evaluate

(1.3) Draw and explain WiMAX network architecture.   [7.0]

CO :- CO1, CO2
Blooms Taxonomy :- Remember, Evaluate

(Q2) **All Questions are compulsory**   [10.0]

(2.1) Explain HSPA architecture   [4.0]

CO :- CO1, CO2
Blooms Taxonomy :- Remember, Evaluate

(2.2) Explain heterogeneous networks in detail.   [6.0]

CO :- CO3
Blooms Taxonomy :- Understand

OR [2.2 / 2.3]

(2.3) Explain Multimode terminals and intersystem handover.   [6.0]

CO :- CO3
Blooms Taxonomy :- Understand

(Q3) **All Questions are compulsory**   [10.0]

      (3.1) Write note on channel structure of LTE.   [3.0]

          CO :- CO1, CO2
          Blooms Taxonomy :- Remember, Evaluate

      (3.2) Explain downlink OFDMA radio resource in detail.   [7.0]

          CO :- CO3
          Blooms Taxonomy :- Understand

OR [3.2 / 3.3]

      (3.3) Explain H-ARQ on downlink uplink channel transport processing.   [7.0]

          CO :- CO3
          Blooms Taxonomy :- Understand

(Q4) **Attempt any two out of three questions**   [10.0]

      (4.1) Explain retro directive arrays.   [5.0]

          CO :- CO1, CO2
          Blooms Taxonomy :- Remember, Evaluate

      (4.2) Explain spatial filtering with beam formers.   [5.0]

          CO :- CO3
          Blooms Taxonomy :- Understand

      (4.3) Explain diversity techniques.   [5.0]

          CO :- CO3
          Blooms Taxonomy :- Understand

****