

Total No. of Questions : 6]

SEAT No. :

PA-10201

[Total No. of Pages : 1

[6010]-74

B.E. (E & TC) (In Sem.)

MOBILE COMPUTING

(2019 Pattern) (Semester - VIII) (404191(E)) (Elective - V)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates :

- 1) Q.1 and Q.2 are compulsory. Solve Q.3 or Q.4 and Q.5 or Q.6.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume suitable data, if necessary.

Q1) Compare TDMA, FDMA and CDMA. List applications of each. [7]

Q2) Draw and explain GPRS architecture. [7]

Q3) Consider a slow FHSS system with  $m$ -ary FSK with number of bits per symbol = 2, two symbol per hop & PN sequence generated output with binary message of 101011011110. The message is transmitted using following PN sequence with  $K = 3$  {001 110 101 000 101}. Plot output of the system. [8]

OR

Q4) Explain connection establishment steps of mobile terminated call (MTC) and mobile originated call (MOC) in GSM. [8]

Q5) Classify MAC protocols and explain any two in detail. [8]

OR

Q6) What is handover in cellular network and when does handover occur? Explain handover mechanism in detail. [8]

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