

No. of Printed Pages : 4

Roll No.

121063/031063

4th Sem. / E.C.E.

**Subject : Wireless & Mobile Communication /
Digital & Data Comm.**

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note:Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

- Q.1
- a) Define Wireless Communication.
 - b) Define page.
 - c) Expand I.M.T.S.
 - d) Write the frequency range of U.H.F.
 - e) Write full form of A.M.P.S.
 - f) Write full form of LTE related to 4-G.
 - g) Define cell.
 - h) Define frequency reuse factor.
 - i) Write full form of S.S.M.A

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- j) Write any two features of FDMA.
- k) Write full form of G.P.S.
- l) Define Bluetooth.
- m) List any two uses of WIFI.
- n) For what purpose , HLR is provided?
- o) In what transmission start and stop bits are used?
- p) Define synchronous transmission.
- q) List any two modes of data transmission.
- r) List any two advantages of digital communication.

SECTION-B

Note:Short answer type questions. Attempt any ten parts 10x4=40

- Q.2
- i) Explain cellular system architecture.
 - ii) Explain in brief paging system.

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- iii) Write any four advantages of wireless communication.
- iv) Explain in brief 3G cellular telephone system.
- v) Explain in brief IS -95 cellular system.
- vi) Explain in brief co-channel interference.
- vii) Explain , why hexagonal cell is preferred?
- viii) Explain cellular frequency reuse concept in brief.
- ix) Write any six features of TDMA.
- x) Explain in brief SSMA.
- xi) Write a short note an GPS.
- xii) Explain in brief GPRS.
- xiii) List any six applications of bluetooth.
- xiv) Explain in brief parallel data transmission.
- xv) Draw and explain the block diagram of data communication system in brief.

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SECTION-C

Note: Long answer type questions. Attempt any three questions. 3x10=30

- Q.3 Draw and explain the block diagram of digital communication system. Also explain the advantages and limitations of digital communication. 5+5
- Q.4 Draw and explain the GSM system architecture. 3+7
- Q.5 List different multiple access techniques. Also compare them in a tabular form. 3+7
- Q.6 Explain power control for reducing interference.
- Q.7 (a) Explain 4 G communication system. 5
(b) Explain cordless telephone system. 5

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