

SEVENTH SEMESTER B.TECH. (ENGINEERING)
[SUPPLEMENTARY] EXAMINATION, JUNE

CS/PTCS 09 701—WIRELESS NETWORKS AND MOBILE COMMUNICATION SYSTEM

(2009 Scheme)

Time: Three Hours

Maximum: 70 Marks

## Part A

Answer any **five** questions. Each question carries 2 marks.

- I. (a) Define Handoff.
  - (b) Mention the popular cellular telephony networks.
  - (c) Define Network Signalling.
  - (d) Mention the advantages of using the GSM.
  - (e) State the characteristics of the GPRS.

 $(5 \times 2 = 10 \text{ marks})$ 

## Part B

Answer any four questions. Each question carries 5 marks.

- II. (a) Explain about the Radio Link Transfer technique.
  - (b) Explain about the PCS Architecture.
  - (c) Write a note on Interconnection and message routing in Network Signalling.
  - (d) Explain about the Radio Resource Allocation technique.
  - (e) Explain about the Mobile number portability in GSM.
  - (f) Explain about the working of the WAP.

 $(4 \times 5 = 20 \text{ marks})$ 

## Part C

Answer all questions.

Each question carries 10 marks.

III. (a) Explain about the working of the cellular Telephony networks.

Or

- (b) Explain the Handoff Management and the Types of Handoff in detail.
- IV. (a) Explain in detail about the CDPD Air interface mechanism.

Or

(b) Explain in detail about the Inter system Handoff and authentication in IS-41.

Turn over

V. (a) Explain in detail about the GSM Network Signalling.

Or

- (b) Explain about the GSM short message service technique.
- VI. (a) Explain about the GPRS functional groups and Architecture.

Or

(b) Explain the working of the GPRS Network modes and interfaces.

 $(4 \times 10 = 40 \text{ marks})$