

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

(2009 Scheme)

CS/PTCS 09 701 - WIRELESS NETWORKS AND MOBILE COMMUNICATION

Time: Three Hours

Maximum: 70 Marks

Part A

Answer all questions.

- I. (a) What do you mean by Handoff?
 - (b) Write the significance of using the Third generation wireless systems.
 - (c) Define Signal System 7.
 - (d) Define GSM.
 - (e) Write the features of WAP.

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

Part B

Answer any four questions.

- II. (a) Write a note on cordless telephony.
 - (b) Explain the working of the message routing technique.
 - (c) Write about the working of the GSM.
 - (d) Explain about the functional groups of the General Packet Radio Service.
 - (e) Mention about the popular cellular telephony networks.
 - (f) Write a note on Radio Resource Allocation.

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

Part C

Answer all questions.

III. (a) Explain in detail about Roaming Management and Handoff Management.

Or

(b) Explain in detail about PCS Architecture.

IV. *(a) Explain in detail about the PCN/PSTN call control using ISUP.

Or

- (b) With a neat sketch, explain about the Cellular Digital Packet Data Architecture.
- V. (a) Explain in detail about the GSM mobility Management.

Or

- (b) Write a detailed note in GSM Short Message Service.
- VI. (a) Explain the architecture of the General Packet Radio Service.

Or

(b) Explain the working of the GPRS Network Interfaces.

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