Name Reg. No.

SEVENTH SEMESTER B.TECH. (ENGINEERING) DEGREE

CS 09 701—WIRELESS NETWORKS AND MOBILE COMMUNICATION

Time: Three Hours

Maximum: 70 Marks

Part A

- I. (a) Define the need for the radio link transfer.
 - (b) Define Handoff.
 - (c) What do you mean by message routing?
 - (d) Define GSM.
 - (e) State the characteristics of the GPRS.

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

Part B

- II. (a) Explain the popular cellular telephony networks.
 - (b) Explain the concept of mobility management.
 - (c) How is the Radio Resource Allocation done?
 - (d) Explain about the CDPD air interface.
 - (e) Write a note on GSM network signalling.
 - (f) How does a GPRS work? Mention its principle of working.

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

Part C

III. (a) Explain in detail about the third generation wireless systems.

Or

- (b) Explain in detail about Roaming Management.
- IV. (a) Explain about the intersystem handoff and authentication in Is-41.

Or

- (b) With a neat sketch, explain about the cellular digital packet data architecture.
- V. (a) Explain in detail about the GSM short message service.

Or

- (b) Write about the working of the mobile number portability technique.
- VI. (a) Explain the functional groups of the GPRS in detail.

Or

(b) Explain about the working of the GPRS network nodes and interfaces.

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