



Iqra National University, Peshawar

Department of Computer Science

Date: 23 /June/2020

Final-term Examination

Course Title: Cellular Mobile Communications

Lecturer: Engr. Latif Jan

Total Marks: 50

Time Allowed:

Q 1) a) Briefly explain the 1st Generation of cellular telephony by highlighting its importance relevant to different countries? **(2 marks)**

Q 1) b) What are the three main types of Mobile Equipment (ME)? Explain them briefly? **(3 marks)**

Q 2) a) What is a SIM? What are the several pieces of information which a SIM contains? Explain in simple words. **(5 marks)**

Q 2) b) Explain the working of OMS (Operation and Maintenance system) in the GSM architecture. **(5 marks)**

Q 3) a) What is a Transcoder? Make the diagrammatic representation of a transcoder? **(5 marks)**

Q 3) b) What do you understand by NSS? Briefly explain MSC, HLR, VLR and EC ? **(8 marks)**

Q 4) a) Explain the Authentication process along with its flow diagram. **(5 marks)**

Q 4) b) ITU-TS Signaling System # 7 is used in the GSM network? How it works? Also make an OSI layers (diagrammatic representation) of it. **(5 marks)**

Q5) a) Write about the flexible handover processes in GSM system. Explain them according to its attributes. **(5 marks)**

Q5) b) Write in detail about the Frequency Spectrum of GSM, Extended GSM 900 (EGSM), GSM 1800 (DCS1800) and PCS1900. **(7 marks).**

😊 Best of Luck 😊