

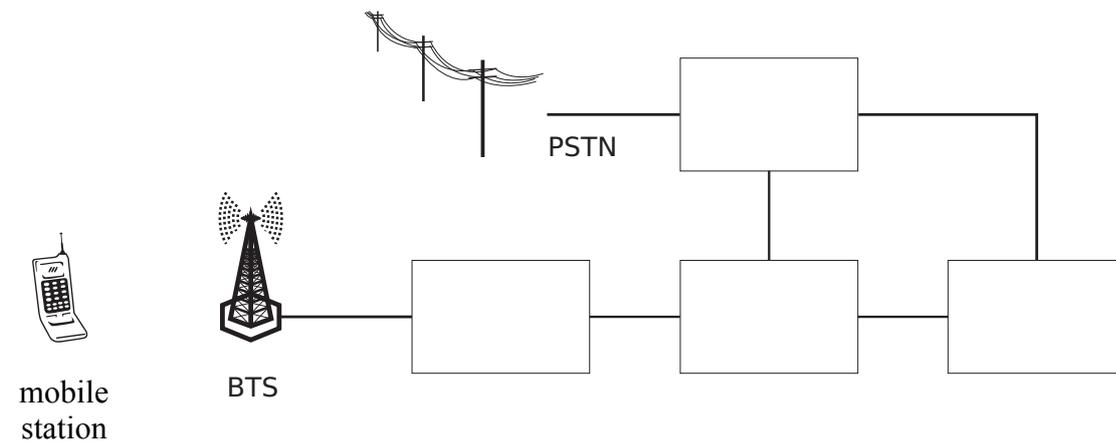
1. Choose from the following list what can be found on a SIM card.

IP (internet address), IMSI (subscriber identification number), MAC (physical address), TMSI (temporary subscriber identification number), GPS (positioning module), user memory, authentication key, RR (radio resources management), IMEI (device identification)

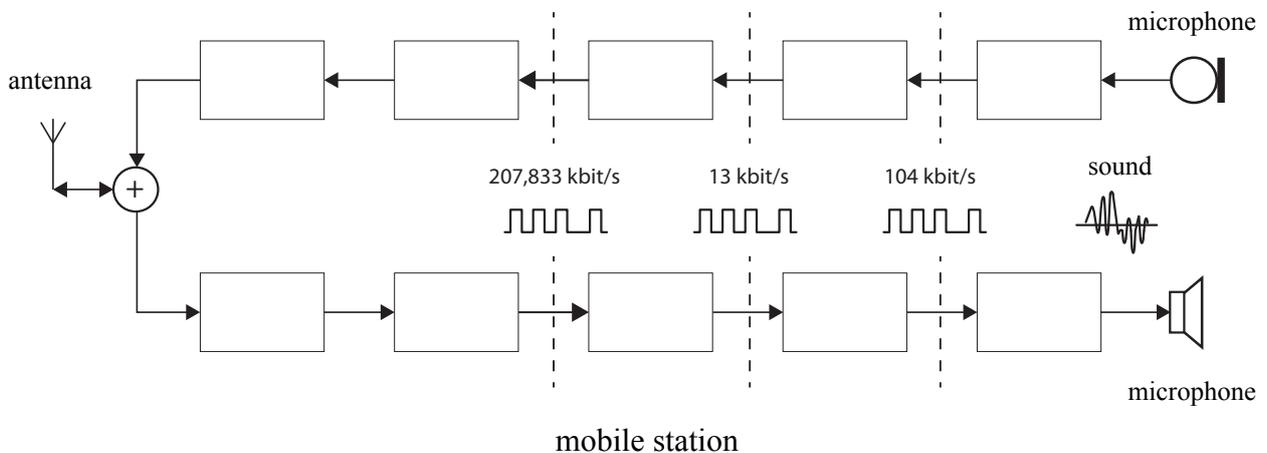
2. Sort the GSM standards according to the maximum number of available channels in a single cell from the lowest (1) to the highest (3)

- ___ GSM 900
- ___ GSM 1800
- ___ GSM 1900

3. Complete the GSM network architecture.



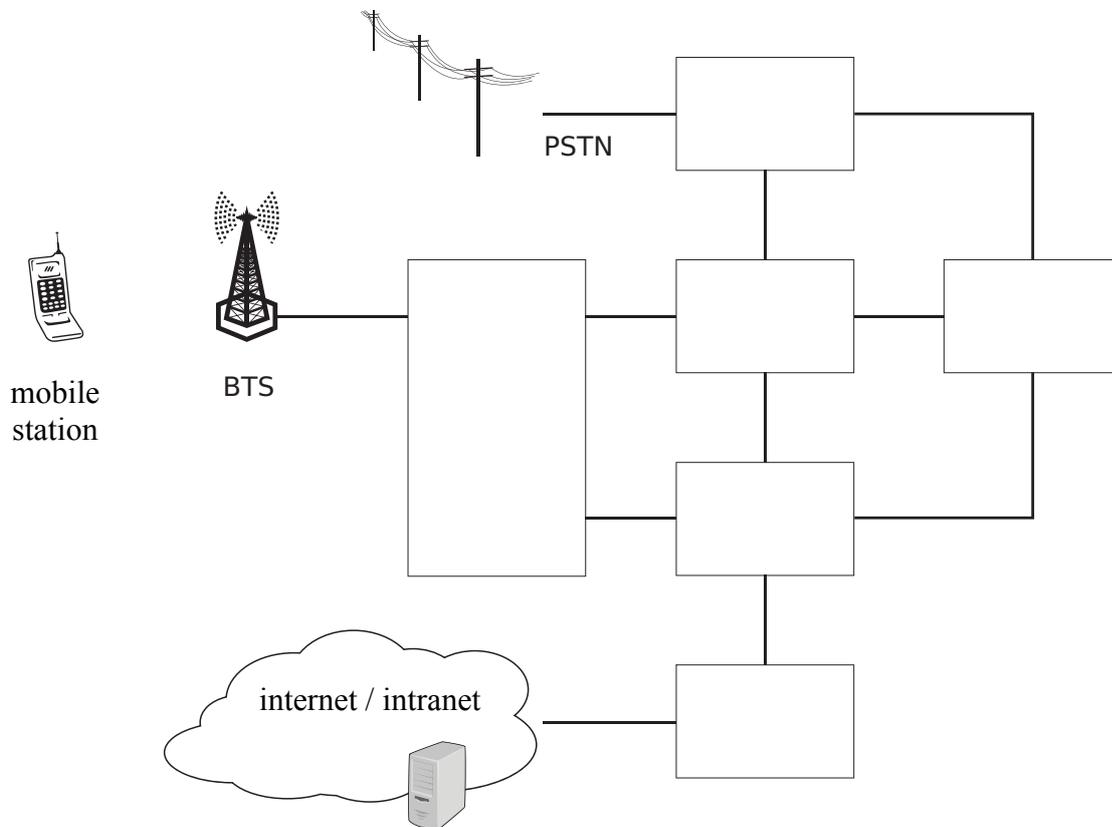
4. Complete the block diagram of a mobile station.



5. Sort the data transmission technologies (conventional GSM and 2.5G systems) according to the maximum theoretical transmission speed, from the slowest (1) to the fastest (4).

- ___ CSD
- ___ EDGE
- ___ HSCSD
- ___ GPRS

6. Complete the GSM architecture and functional blocks implementing GPRS technology.



7. Choose from the offered options and complete the characteristics of the individual data transmission technologies in 2G and 2.5G mobile networks.

EDGE _____

CSD _____

GPRS _____

HSCSD _____

- | | | | |
|---|--|---|---------------------------------|
| 1 | one reserved radio channel per subscriber | 4 | circuit switching communication |
| 2 | more than one radio channel per subscriber | 5 | modulation scheme 8-PSK |
| 3 | packet switching communication | 6 | modulation scheme GMSK |

8. Correct the following statements so that they are true.

The higher delay of data packets in a network can be observed with ($\begin{matrix} \text{packet} \\ \text{circuit} \end{matrix}$) oriented communication.

Implementation of GPRS technology in GSM network brings more efficient management of the allocated transmission resources, i.e., the transmission resources are allocated for ($\begin{matrix} \text{limited} \\ \text{unlimited} \end{matrix}$) time.