

TKT-3516 SIGNAL PROCESSORS

Exam Nov. 11 2005

14. 11. 2005

1. Explain shortly:
 - a) Q15 representation
 - b) Program discontinuity buffer
 - c) Interlocking
 - d) Load-store architecture
 - e) Truncation of magnitude
 - f) Guard bit in floating-point systems
2. Explain the principle of a repeat buffer and how it differs from other cache systems.
3. Shifters can be found in several locations of DSP processors. Describe three locations and explain how they are used, i.e., what is the purpose of shifter in each location.
4. Explain gradual underflow.