**Digital Computer Design**

**1.** Modify the single-cycle ARM processor to implement one of the following instructions. See [**ARM-REFERENCE**](https://sinanyil81.github.io/courses/2019/dcd/arm-reference-protected.pdf)for a definition of the instructions. Name any new control signals. Show the changes to the Main Decoder and ALU Decoder. Describe any other changes that are required.

(a) TST

(b) LSL

(c) CMN

(d) ADC

**2.** Repeat Question 1 for the following ARM instructions.

(a) EOR

(b) LSR

(c) TEQ

(d) RSB