2, 5, 10, 14 — 8, 10

Unit-3: [8 hrs]

(1) State the differences bet ARM and THUMB states. (Given in class)
[William Hohl text Pg 213]

(2) Describe why veneers might be needed in a program (THUMB) execution.
[W. Hohl text Pg 218-219]

(3) How is switching bet ARM and THUMB states established?
[W. Hohl text Pg 216]

(4) Write an ALP to search a given number in an array and give the position, if the number is found then the position of the number must be 9 in R5 else (not found) R5 = 0. (ALP Pgms sent)

(5) Write an ALP to find the largest number in a given array, and store in internal RAM 0X40000000 and also in register R2. (ALP Pgms sent)

(6) Write an ALP to find the length of given strin
Store the Result (length of string) in register R (ALP Pgms sent)

2 — CO2 SM
5 — CO2
10 — CO3
14 — CO3

CIA
8 — CO2
10 — CO4,5

(6) Name and explain three ways in which FIQ interrupts are handled more quickly than IRQ interrupts.

(7) Explain the steps the ARM7TDMI processor takes when handling an exception? Also name the ARM processor exceptions and associated modes?
Slos 1st
Pg 318

(8) How are simultaneous exceptions handled by ARM7 processor? Explain.
Pg 321
Slos

(9) Write different methods of returning from an IRQ or FIQ exception handler in ARM7 processor?
Slos
Pg. 322.

(10) What is interrupt latency? Explain the two main methods to minimize interrupt latency?
Slos
Pg 325

(11) Explain the procedure followed by the processor when an IRQ or FIQ exception occurs?
Slos
Pg 326

(12) Write the steps involved while enabling an interrupt manually, with example.
Slos
Pg 329

(13) Write the steps involved while disabling an interrupt manually with example.
Pg 328.
Slos