cycle)

ANSWER:-

First Instruction:

• Fetching:

AC: 0000

IR: 1940

PC: 300

940: 0003

941: 0002

• Execution:

AC: 0003

IR: 1940

PC: 300

940: 0003

941: 0002

Second Instruction:

• Fetching:

AC: 0003

IR: 5941

PC: 301

940: 0003

941: 0002

• Execution:

AC: 0005

IR: 5941

PC: 301

940: 0003

941: 0002

Third Instruction:

• Fetching:

AC: 0005

IR: 2941

PC: 302

940: 0003

941: 0002

• Execution:

Ac: 0000

IR: 2941

PC: 302

940: 0003

Show the contents of PC , AC and IR and memory after the execution of each instruction of the following program on the Hypothetical Machine:

300 LOAD 550

301 ADD 551

302 STORE 600

the contents of memory at 550 is 3 and at 551 is 4