```
 0              3 4                              15
┌──────────────┬────────────────────────────────┐
│   Opcode     │            Address             │
└──────────────┴────────────────────────────────┘
```

(a) Instruction format

```
 0    1                                         15
┌────┬───────────────────────────────────────────┐
│ S  │               Magnitude                    │
└────┴───────────────────────────────────────────┘
```

(b) Integer format

Program Counter (PC) = Address of instruction
Instruction Register (IR) = Instruction being executed
Accumulator (AC) = Temporary storage

(c) Internal CPU registers

0001 = Load AC from Memory
0010 = Store AC to Memory
0101 = Add to AC from Memory

(d) Partial list of opcodes

Figure 1.3   Characteristics of a Hypothetical Machine