Based on the document provided, here are the CLI commands extracted step-by-step. I have corrected minor typos from the source text (such as missing spaces in command words) to ensure they work correctly in Packet Tracer.

Initial Configuration & Shutdown Mode

Step 3 & 4 (PC Command Prompt)

(Repeat for PC1, PC2, PC3)

DOS

ping <IP address of other PCs>

Step 5 & 6 (Switch CLI - Configure Shutdown Mode)

Cisco CLI

```
enable
configure terminal
interface fa0/1
 switchport mode access
 switchport port-security
 switchport port-security mac-address sticky
 switchport port-security maximum 1
 switchport port-security violation shutdown
 exit

interface fa1/1
 switchport mode access
 switchport port-security
 switchport port-security mac-address sticky
 switchport port-security maximum 1
 switchport port-security violation shutdown
 exit

interface fa2/1
 switchport mode access
 switchport port-security
 switchport port-security mac-address sticky
 switchport port-security maximum 1
 switchport port-security violation shutdown
 exit
end
```

Verification (Switch CLI)

Cisco CLI

```
show port-security
show port-security interface fa0/1
show port-security interface fa1/1
show port-security interface fa2/1
show mac address-table
```

Step 10 (Rogue PC Command Prompt)

DOS

```
ping 192.168.5.15
```

Step 11 (Switch CLI - Check Violation)

Cisco CLI

```
enable
show port-security
show port-security interface fa0/1
show mac address-table
```

Step 13 (Switch CLI - Re-enable Port after Violation)

Cisco CLI

```
enable
configure terminal
interface fa0/1
 shutdown
 no shutdown
end
show mac address-table
```

Step 14 (PC1 Command Prompt)

DOS

```
ping 192.168.5.15
ping 192.168.5.20
```

Restrict Mode

Step 1 (Switch CLI)

Cisco CLI

```
enable
configure terminal
interface fa1/1
 switchport mode access
 switchport port-security
 switchport port-security violation restrict
 exit
end
show port-security
show port-security interface fa1/1
```

Step 3 (Rogue PC Command Prompt)

DOS

```
ping 192.168.5.10
ping 192.168.5.20
```

Step 4 (Switch CLI - Check Violation Count)

Cisco CLI

```
show port-security
show port-security interface fa1/1
```

Step 6 (PC2 Command Prompt)

DOS

```
ping 192.168.5.10
ping 192.168.5.20
```

Protect Mode

Step 1 (Switch CLI)

Cisco CLI

```
enable
configure terminal
interface fa2/1
 switchport mode access
 switchport port-security
 switchport port-security violation protect
 exit
end
show port-security
show port-security interface fa2/1
```

Step 4 (Rogue PC Command Prompt)

DOS

```
ping 192.168.5.10
ping 192.168.5.20
```

Step 5 (Switch CLI)

Cisco CLI

```
show port-security
show port-security interface fa1/1
show mac address-table
show ip interface brief
```

PC Command Prompt (Continuous Ping)

DOS

```
ping -t 192.168.5.10
```

(Press Ctrl+C to stop)