**9.11:**

A. Virtual Address: 0x027C = Bin(001001111100)



B.

VPN: **0x27**

TLB Index: **0x**0**3**

TLB Tag: **0x09**

TLB Hit? **No**

Page Fault? **Yes**

PPN? **-**

C. Physical Address:



D.

Byte Offset

Cache Index

Cache Tag

Cache Hit?

Cache Byte Returned

**9.12:**

A. Virtual Address: 0x03A9 = Bin(0000 11 1010 1001)



B.

VPN: **0x0e**

TLB Index: **0x02**

TLB Tag: **0x03**

TLB Hit? **No**

Page Fault? **No**

PPN? **0x11**

C. Physical Address:



D.

Byte Offset **0x1**

Cache Index **0xA**

Cache Tag **0x11**

Cache Hit? **No**

Cache Byte Returned -

**9.13:**

A. Virtual Address: 0x0040 = Bin(0000 00 0100 0000)



B.

VPN: **0x01**

TLB Index: **0x01**

TLB Tag: **0x00**

TLB Hit? **No**

Page Fault? **Yes**

PPN? **-**

C. Physical Address:



D.

Byte Offset

Cache Index

Cache Tag

Cache Hit?

Cache Byte Returned