1. Choose the right word to the place of three dots (…):

   If there are M bits of memory, we need … bits for representing a memory address:

   a) $\log_2 M$
   b) $M$ / 128
   c) $\lg M$
   d) $\ln M$

2. Choose the right word to the place of three dots (…):

   If there are N bytes of block memory we need $\log_2 N$ bits for representing …:

   a) tag
   b) index
   c) offset

3. Choose the right words to the place of three dots (…):

   ……be reprogramed several times (up to 100) and be erased by UV light.

   a) EPROM cannot
   b) EPROM can
   c) ROM can

4. Choose the right words to the place of three dots (…):

   SRAM …a capacitor and …destructive upon a read.

   a) doesn't need, is
   b) needs, is not
   c) doesn't need, is not
   d) needs, is

5. Choose the right words to the place of three dots (…):

   DRAM …a capacitor and …destructive upon a read.

   a) doesn't need, is
   b) needs, is not
   c) doesn't need, is not
   d) needs, is

6. Which of them are crucial features needed for multi-programming:

   I. program relocation

II. memory protection

III. privileged modes of operation

IV. timer interrupts

a) I, II, III

b) II, III, IV

c) I, II, III, IV

d) I, II, IV

7. Choose the right words to the place of three dots (…):

   When a job stops execution, that memory …. This freed memory is called a …, which causes fragmentation.

   a) is freed, junk

   b) is not freed, hole

   c) is freed, hole

   d) is not freed, junk

8. How can you calculate the number of lines in cache?

   a) *cache size / cache block size*

   b) *cache size* $*$ *cache block size*

   c) *cache size/ number of bits representing memory address*

9. How many ways to map the blocks of memory to lines of cache do exist?

   a) 1

   b) 2

   c) 3

   d) 4

10. Choose the right words to the place of three dots (…):

    A …may have a penalty of 100 cpu cycles or more. If it is a …, this penalty can be over a million CPU cycles.

    a) miss, page fault

    b) page fault, miss,

    c) miss, hole

Answers:

1) a
2) c
3) b
4) c
5) d
6) c
7) c
8) a
9) c
10) a