Hewlett-Packard PA-64 Multiple Choice Questions:
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1. What type of branch prediction does PA-RISC 2.0 allow for?
   a. static
   b. dymanic
   c. both a & b
   d. none of the above

   Correct answer: c

2. Which version of PA-RISC architecture does all PA-8x00 processors use?
   a. PA-RISC 1.0
   b. PA-RISC 1.1
   c. PA-RISC 2.0
   d. PA-RISC 2.1

   Correct answer: c

3. PA-RISC 2.0 processors can fetch how many instructions per cycle?
   a. 1
   b. 2
   c. 3
   d. 4

   Correct answer: d

4. How large is the L2 cache for the PA-8800?
   a. 64MB
   b. 32MB
   c. 16MB
   d. 8MB

   Correct answer: b.

5. The PA-RISC 2.0 processors implement which cache architecture?
   a. Harvard
   b. von Neumann
   c. Crafton
   d. None of the above

   Correct answer: a.

Below are the multiple choice questions (Broome-Kagarise-Overstron-Lindsay: Intel 8086):

What is Op-code?

    a)   The instruction that is to be executed (correct answer)
    b)   The value in which an operation acts upon
    c)   A mnemonic that defines a data size
    d)   The compiled assembly code

What are the names of the 4 segment registers?

    a)   Data, Index, Code, Stack
    b)   Stack, Index, Extra, Code
    c)   Stack, Data, Base, Counter
    d)   Stack, Extra, Code, Data (correct answer)

How much memory space does the 8086 have?

    a)   256Kb
    b)   512Kb
    c)   1M (correct answer)
    d)   4M

How many bits wide is the address bus on the 8086 Processor?

    a) 8-Bits
    b) 16-Bits
    c) 20-Bits (correct Answer)
    d) 24-Bits

How many transistors does the 8086 have?

    a) 10,000
    b) 29,000 (correct Answer)
    c) 110,000
    d) 129,000

Here is our term project (Mittner-Paetz-Olschofka: Pentium 4 processors).

1.   *What generation chip is the Pentium 4 for the Intel central processing units?*
        A.   Seventh generation
        B.   Eighth generation
        C.   Ninth generation
        D.   Tenth Generation
        Correct answer: A

2.   *What speed system buses can the Pentium 4 support?*
        A.   800, 533, 400 megahertz
        B.   200, 400, 533 megahertz
        C.   400, 450, 600 megahertz
        D.   100, 200, 400 megahertz
        Correct answer: A

3.   *RAID 0 uses this technique to write to the Hard Drive*
        A)   Dumping
        B)   Stripping
        C)   Slapping
        D)   Mirroring
        Correct answer: B

4.   *Hyper-Threading turns a physical processor into how many*
logical processors.
        A)   1
        B)   2
        C)   3
        D)   5
        Correct answer: B

5.   *The 90nm Process consists of…*
        A)   Strained Silicon
        B)   High-speed copper interconnects
        C)   "low-k" dielectric insulating material
        D)   All of the above
        Correct answer: D

Questions for Review (Prochnow, Femiano, Peppler, Boucher: Cray X-1):

1.) How many multi-chip modules (MCM) are there on every node in the Cray X1?
        a. 1
        b. 2
        c. 3
        d. 4

2.) How are the multi-streaming processors cooled in the Cray X1?
        a. They are sprayed with Fluorinert
        b. They are cooled by fans
        c. They are sprayed with water

d.   They are immersed in water

3.) What does it mean to say that the memory on the Cray X1 is globally addressable?
a.   Any computer on the globe can access the memory
b.   Any component on any node can access the memory on another node
c.   The memory is in a centralized location and is accessed globally by the nodes
d.   The memory address must be specified by a global addressing unit

4.) Which of the following is NOT a common application for the Cray X1 supercomputer
a. nuclear research and simulation
b. atmosphere forecast
c. commercial banking
d. cryptology

5.) Cray machines can be purchased in one of two types of cabinets, which are they?
a. air cooled and liquid cooled
b. air heated and liquid cooled
c. air cooled and liquid heated
d. air heated and liquid heated

Answers to Questions

1.) d
2.) a
3.) b
4.) c
5.) a

(O'Malley, Lenhardt, Payne, Taylor: Intel Processors)

The 4004 microrprocessor was released in the year of:
a.) 1964
b.) 1968
c.) 1972
d.) 1971
e.) 1974
f.) 1978

The answer is c.

The 8086/8088 used two processoring units which were known as:
a.) Left and Right Units

b.) Segment and Offset Units
c.) Bus Unit and Execution Interface Unit
d.) ALU and Control Unit
e.) Bus Interface Unit and Execution Unit

The answer is e.

The designer of the 4000 chip set was:
a.) Marcian Hoff
b.) Jack Kilby
c.) Bill Gates
d.) Federico Faggin
e.) John Rogers

The answer is d.

The 8086 was how many bit processor?
a.) 4
b.) 8
c.) 16
d.) 32
e.) 64

The answer is c.

The first processor to include Virtual memory in the Intel microprocessor family was:
a.) 4004
b.) 8008
c.) 8080
d.) 8088
e.) 80286
f.) 80386
g.) 80486
h.) Pentium
i.) Pentium Pro

The answer is e.

Exam questions K(Kopek, Snead, Kenny, Casbeer: AMD-64 and Intel IA-64):

1.   AMD 64 is based upon which architecture?
a.   IA-64 architecture

b.   X86 architecture
c.   CISC architecture
d.   XMM architecture
e.   None of the above

Answer: B

2.   AMD 64 supports 2 main operating modes for which type of operating systems
and applications:
a.   64-bit and 32-bit
b.   32-bit and 16-bit
c.   64-bit and 8-bit
d.   8-bit and 16-bit
e.   32-bit and 8-bit

Answer: A

3.   Which technology allows faster bus speeds on the AMD 64?
a.   AGP-BUS
b.   PCI-BUS
c.   Supertransport
d.   Hypertransport
e.   None of the Above

Answer: D

4.   Which type of Processing do the EPIC instructions in the Intel Itanium use?
a.   Serial Processing
b.   Parallel Processing
c.   Mixed
d.   None of the Above

Answer: B

5.   Intel Itanium processors are designed for
a.   Servers and personal computers
b.   Servers only
c.   Personal computers only
d.   Calculators

Answer: B

Here are the 5 multiple choice questions omano-Kennedy-Robertson: Chipsets for Intel & AMD):

1) Which chipset manufacturer was not given a license to manufacture Pentium 4 and suffered legal consequences?
*   A) SiS*
*   B) VIA*
*   C) nVidia*
*   D) AMD*
*   (Answer: B)*

2) What chipset was adapted for Xeon use but was only intended to be used for Pentium 4 Processors?
*   A) 845G*
*   B) E7505*
*   C) 875P*
*   D) VIA K8T800*
*   (Answer: C)*

3) Which of these is NOT true? The chipset integrates features that determine:
*   A) The maximum wattage for the power supply*
*   B) The size of the L2 cache*
*   C) The internal clock speed capabilities*
*   D) The types of expansion slots available*
*   (Answer: A)*

4) Name one of the two properties determined by the chipset that provides the CPU with its speed capabilities.
*   A) Front Side Bus speed and the processor multiplier*
*   B) amount of cacheable memory and size of cache*
*   C) width of PCI bus and width of memory bus*
*   D) number of expansion slots and peripheral devices*
*   (Answer: A)*

5) Which chipset used hub architecture:
*   A) Triton 430FX*
*   B) Triton 430TX*
*   C) 430LX*
*   D) 820*
*   (Answer: D)*

(Stenger-Greenfield-Ting-Pozun: PCI Bus):

1. What is a feature of the PCI bus?
   a) Extended System Configuration Data
   b) Burst Mode*
   c) Direct Memory Access
   d) None of the above

2. What layer in the PCI Express Architecture allows for QoS to take place?
   a) Physical
   b) Link*
   c) Transaction
   d) Software

3. The PCI Bus Architecture is based on two existing architectures which of the following is one of them?
   a) AGP Bus
   b) Data Bus
   c) VESA Local Bus*
   d) Front Side Bus

4. What operating system supports Plug and Play?
   a) Linux
   b) Windows*
   c) Unix
   d) OS2

5. What is the Voltage standard for PCI?
   a) 3.3
   b) 5
   c) 2.3
   d) more than one of the above*