**Question 1: What is the vm system called that is configured for assignment 0?**

Dumbvm, Refer to: kern/arch/mips/conf.arch, implemented in kern/arch/mips/vm/dumbvm.c

**Question 2. Which register number is used for the stack pointer (sp) in OS/161?**

$29, Refer to: kern/arch/mips/include/kern/regdefs.h

**Question 3. What bus/busses does OS/161 support?**

LameBus - Linear Always-Mapped Extents, Refer to: kern/arch/sys161/include/bus.h

**Question 4. Why do we use typedefs like uint32\_t instead of simply saying "int"?**

To specify that a value is an unsigned 32-bit int. Different architectures handle ‘int’ as different sizes. Specifying like this allows us to make sure that it will be a consistent number of registers/memories each time - always 32bits, unsigned, and thus allows for simplifying compatibility across platforms. It also allows us to get more mileage out of a variable that we know will never go negative.

**Question 5. What function is called when user-level code generates a fatal fault?**

Static void kill\_curthread(vaddr\_t epc, unsigned code, vaddr\_t vaddr)

**Question 6. How frequently are hardclock interrupts generated?**

This is called HZ times a second (on each processor) by the timer code. 1 HZ is 100

**Question 7. How many characters are allowed in an SFS volume name?**

SFS\_NAMELEN 60 /\* max length of filename \*/

**Question 8. How many direct blocks does an SFS file have?**

512?

**Question 9. What is the standard interface to a file system (i.e., what functions must you implement to implement a new file system)?**

**Question 10. What function puts a thread to sleep?**

**Question 11. How large are OS/161 pids?**

**Question 12. What operations can you do on a vnode?**

**Question 13. What is the maximum path length in OS/161?**

**Question 14. What is the system call number for a reboot?**

**Question 15. Where is STDIN\_FILENO defined?**

**Question 16. What does kmain() do?**

**Question 17. What is the difference between splhigh and spl0?**

**Question 18. What does splx return?**

**Question 19. What is a zombie?**

**Question 20. What does a device name in OS/161 look like?**

**Question 21. What does a raw device name in OS/161 look like?**

**Question 22. What lock protects the vnode reference count?**

**Question 23. What device types are currently supported?**