1. (5 pts) What is the name of the object-oriented technique where different objects react differently to the same message?

2. (5 pts) What class does the toString() method belong to and what is this method supposed to do?

3. (5 pts) What are the conventional prefixes for mutator and accessor methods?

4. (5 pts) What is a class required to do if it implements an interface?

5. (5 pts) Describe how the BorderLayout manager arranges components.

6. (5 pts) How does the GridBag layout manager differ from the Grid layout?

7. (5 pts) Why, by default in a web browser, are applets not permitted to do file operations?

8. (5 pts) What host(s) can an applet make a network connection to, by default in a web browser?
9. (5 pts) In an applet what are the start() and stop() methods for? Give an example when they should be used.

10. (5 pts) How would you have a class use threads, if it already extends another class?

11. (5 pts) Why should only one thread execute a critical section at a time? How is this enforced in Java?

12. (5 pts) Why is it important that a cpu-intensive thread call yield() or sleep() on a uniprocessor?

13. (5 pts) Explain why the wait() and notify() mechanism is much better than busy waiting.

14. (5 pts) How does UDP differ from TCP? Why would you use UDP instead of TCP?

15. (5 pts) Describe how to set up both a TCP client and server in Java.

16. (5 pts) Discuss how the GET and POST methods of passing info to a CGI program differ. (i.e. how do they each pass data to the CGI)
17. (5 pts) How does RMI differ from CORBA?

18. (5 pts) Name and discuss the 5 steps needed to be done to run an RMI client and server.

19. (5 pts) Name 3 of the 4 fundamental transformation used in graphics and give examples of each.

20. (5 pts) The executeUpdate() method is used to execute many of the SQL commands, but not SELECT. What Java method should be used to do a SELECT?

21. (0 pts) BTW, some programmers like to keep their source code private and only distribute code in binary form. Java’s bytecode style would seem like a good way of doing this in a portable way, instead of providing binary files for every platform. But these programmers should be aware that there is a Java decompiler available freely on the Net called jad which will decompile Java bytecode back to the source code.

Have a great rest of the summer!