[handwritten: →HTML, JPEGS ...]

1. Which of the following is the Web's application layer protocol? *[circled: application, with note →HTML, JPEGS...]*

   A. TCP *[handwritten: ⟩ transport layer]*
   B. UDP
   C. HTTP *[circled]* *[handwritten: C]*
   D. DNS *[handwritten: Not the web]*
   E. None of the others

2. Study the following Python code snippet. *[handwritten: ? and by default: 80]*

   ```
   ...
   serverSocket.bind(('', 8080))
   connectionSocket, clientAddr = serverSocket.accept()
   ...
   ```

   [handwritten: Only for TCP ; create new socket.]

   Suppose no exception is raised when the above code snippet is executed, which port number is **connectionSocket** bound to? *[handwritten circle around "which port"]*

   A. TCP port 8080 *[circled]*
   B. UDP port 8080
   C. A random port number assigned by server's operation system
   D. It depends on the client's port that's making the connection.
   E. None of the others

3. In a _____ connection, one TCP connection is made for each HTTP request.

   A. persistent
   B. non-persistent *[circled]*
   C. conditional
   D. stateful
   E. None of the others

   [handwritten: How can Server Close TCP connection? > connection Socket. Close(); TCP]

4. A Web server supports both HTTP/1.0 and HTTP/1.1. So far 120 clients have downloaded a web page from the server, which contains 1 HTML file and 3 images. Half of the clients run HTTP/1.0 and the other half run HTTP/1.1.

   How many sockets has the Web server ever created?

   A. 120
   B. 121
   C. 300 *[crossed out]*
   D. 301 *[checkmark]*
   E. None of the others

   [handwritten left margin: HTTP Server has a welcome Socket to accept connections w/ Client]

   *[handwritten right: table —
   60 | 60
   1.0 | 1.1
   4 TCPs per client | 1 TCP per client = 1 socket / client
   4 sockets
   4×60 + 1×60]*

5. Study the following excerpt of the resource records of NUS's network (TTL field is skipped):

Name	Type	Value
comp.nus.edu.sg	NS	ns1.comp.nus.edu.sg
comp.nus.edu.sg	NS	ns1.nus.edu.sg
comp.nus.edu.sg	MX	postfix0.comp.nus.edu.sg
ns1.comp.nus.edu.sg	A	137.132.90.2
postfix0.comp.nus.edu.sg	A	192.168.21.67
stu.comp.nus.edu.sg	CNAME	stu1.comp.nus.edu.sg
stu1.comp.nus.edu.sg	A	192.168.49.55
ivle.nus.edu.sg	A	137.132.10.10

If you send an email to Soc.cat@comp.nus.edu.sg, to which IP address will the email be delivered?

A. 192.168.21.67

B. 192.168.49.55

C. 137.132.90.2

D. 137.132.10.10

E. None of the others