1. The Internet is organized as a **packet-switched** network. Give two advantages realized from this organization.

2. Explain the differences between **time-sharing** and **client-server** computing approaches.

3. Briefly define the term **embedded computer**, and provide an example where this technology can be used.

4. What is the difference between a **property** and a **method**? Identify each for a spreadsheet application or for a web browser application.

5. How many bits in memory are needed to ensure 640 x 480 screen resolution (i.e., pixel count) using an 8-bits per pixel scheme?

6. You need a specialized word processor as part of your studies in Japanese. You need to choose between a freely-available application provided by the College, or the option to purchase an extension to your current word processor for some amount of money (dollars or yen). As an IT fluent citizen, list three issues to consider in your decision.

7. When is a **GUI** advantageous? When it is not advantageous?

8. Provide the HTML code for the `<BODY>` section to depict the information in the box below:

   **22 Fords Named to Centennial Conference Winter Academic Honor Roll**

   Haverfordians were well-represented on the *Centennial Conference Winter Academic Honor Roll* as 22 Fords were recognized among the conference’s top scholar-athletes of the winter season.

   Also, make “Centennial Conference” a link to [http://www.centennial.org/](http://www.centennial.org/)

9. Discuss the difference between **server-side** (i.e., physical) styles (e.g., bold, italic) and **client-side** (i.e., logical) styles (e.g., strong, emphasis) in HTML.

10. In **hexadecimal**, what is the next number after each of the following
   a. 5
   b. 9
   c. F7
   d. A9
   e. 9F
11. Future computers will have to be based **physical particles** that are lighter and faster than the ones used in our current computers. Name this technology or particle (one word answer)

12. Explain one major milestone in the evolution of the **human computer interface**, focusing on the physical method of interaction (excluding the mouse and keyboard). What does the future hold?

13. **True** or **false**: A computer is currently the world chess champion.