**Identification: (Sa ubos magtuon)**

1. \_\_\_\_\_\_\_\_\_\_\_\_- integrated elements that gather, process, save, and disseminate information to support an organization's decision-making and management.
2. \_\_\_\_\_\_\_\_\_\_\_\_- the outcome of acquired scientific knowledge, skills, procedures, and processes for applied purposes.
3. \_\_\_\_\_\_\_\_\_\_\_\_- intangible compared to hardware.
4. \_\_\_\_\_\_\_\_\_\_\_\_- five major components of information systems.
5. \_\_\_\_\_\_\_\_\_\_\_\_- the first three (3) components of information systems – hardware, software, and data.
6. \_\_\_\_\_\_\_\_\_\_\_\_- the physical component of an information system – tangible parts to users.
7. \_\_\_\_\_\_\_\_\_\_\_\_- includes a set of commands that instruct the hardware what to do.
8. \_\_\_\_\_\_\_\_\_\_\_\_- design software by coding a series of commands instructing the hardware what to do.
9. \_\_\_\_\_\_\_\_\_\_\_\_- two main categories of software.
10. \_\_\_\_\_\_\_\_\_\_\_\_- gives the interface between the hardware and the Application software, such as Microsoft Windows and Ubuntu Linux for computers and Google Android and Apple iOS for smartphones.
11. \_\_\_\_\_\_\_\_\_\_\_\_- information systems were still concerned with governance and the needs of management; more departments were beginning to benefit from the technology.
12. \_\_\_\_\_\_\_\_\_\_\_\_- allows the user to accomplish tasks such as creating documents, encoding data in a spreadsheet, or messaging a friend. Examples include Microsoft Excel, Zoom, and Facebook.
13. \_\_\_\_\_\_\_\_\_\_\_\_- the front-line user support staff to systems analysts to developers.
14. \_\_\_\_\_\_\_\_\_\_\_\_- during this era, information systems are still tied to governance and management, although the systems are widely distributed to every employee who needs them across multiple platforms.
15. \_\_\_\_\_\_\_\_\_\_\_\_- a collection of indisputable raw facts.
16. \_\_\_\_\_\_\_\_\_\_\_\_- predicted that a knowledge society would emerge with the growth of knowledge workers and their rise in importance.
17. \_\_\_\_\_\_\_\_\_\_\_\_- in this era, concentrated information systems started to spread, and information became deconcentrated.
18. \_\_\_\_\_\_\_\_\_\_\_\_- can exist without the capability to communicate.
19. \_\_\_\_\_\_\_\_\_\_\_\_- this era uses networking technology that delivers applications and data storage independent of the configuration or location of the hardware.
20. \_\_\_\_\_\_\_\_\_\_\_\_- The People and Process components of information systems fall under this category.
21. \_\_\_\_\_\_\_\_\_\_\_\_- engaged in information systems are an indispensable element.
22. \_\_\_\_\_\_\_\_\_\_\_\_- a series of steps taken to accomplish the desired goal.
23. \_\_\_\_\_\_\_\_\_\_\_\_- said that information and information systems would become increasingly important, which led him to coin the term “knowledge worker.”
24. \_\_\_\_\_\_\_\_\_\_\_\_- in this era, information systems were centralized and concerned solely with governance and the needs of management.

**Answer Key:**

1. **Information systems** - integrated elements that gather, process, save, and disseminate information to support an organization's decision-making and management.
2. **Technology** - the outcome of acquired scientific knowledge, skills, procedures, and processes for applied purposes.
3. **Software** - intangible compared to hardware.
4. **hardware, software, data, people, and processes** - five major components of information systems.
5. **Technology Components** - the first three (3) components of information systems – hardware, software, and data.
6. **Hardware** - the physical component of an information system – tangible parts to users.
7. **Software** - includes a set of commands that instruct the hardware what to do.
8. **Programmers** - design software by coding a series of commands instructing the hardware what to do.
9. **operating systems and application software** - two main categories of software.
10. **Operating systems software** - gives the interface between the hardware and the Application software, such as Microsoft Windows and Ubuntu Linux for computers and Google Android and Apple iOS for smartphones.
11. **Second Era (The mid-1970s to Mid-1980s): Personal Computer** - information systems were still concerned with governance and the needs of management; more departments were beginning to benefit from the technology.
12. **Application software** - allows the user to accomplish tasks such as creating documents, encoding data in a spreadsheet, or messaging a friend. Examples include Microsoft Excel, Zoom, and Facebook.
13. **People** - the front-line user support staff to systems analysts to developers.
14. **Fourth Era (the Late 1990s to today):** **Enterprise** - during this era, information systems are still tied to governance and management, although the systems are widely distributed to every employee who needs them across multiple platforms.
15. **Data** - a collection of indisputable raw facts.
16. **Drucker** - predicted that a knowledge society would emerge with the growth of knowledge workers and their rise in importance.
17. **Third Era (The mid-1980s to Late 1990s): Client/Server** - in this era, concentrated information systems started to spread, and information became deconcentrated.
18. **Information systems** - can exist without the capability to communicate.
19. **Fifth Era (Moving Forward): Cloud Computing** - this era uses networking technology that delivers applications and data storage independent of the configuration or location of the hardware.
20. **Networking Communication** - The People and Process components of information systems fall under this category.
21. **People** - engaged in information systems are an indispensable element.
22. **Process** - a series of steps taken to accomplish the desired goal.
23. **Peter Drucker** - said that information and information systems would become increasingly important, which led him to coin the term “knowledge worker.”
24. **First Era (The mid-1960s to Mid-1970s): Mainframe and Minicomputer** - in this era, information systems were centralized and concerned solely with governance and the needs of management.