

GSA

Mock Exam 1

(Part-II)

(Section-1)

QNO2:

(a)

Artificial Intelligence:

⇒ Artificial Intelligence is the new electricity. It will transform every industry and create huge economic value.

⇒ It is very good at automating tasks and will have an impact on every sector from healthcare to manufacturing.

⇒ Artificial intelligence drives economic growth by creating new markets and job opportunities in different fields.

⇒ Present challenges such as data privacy and the use of Artificial intelligence in decision making shows that artificial intelligence is developed.

(b)

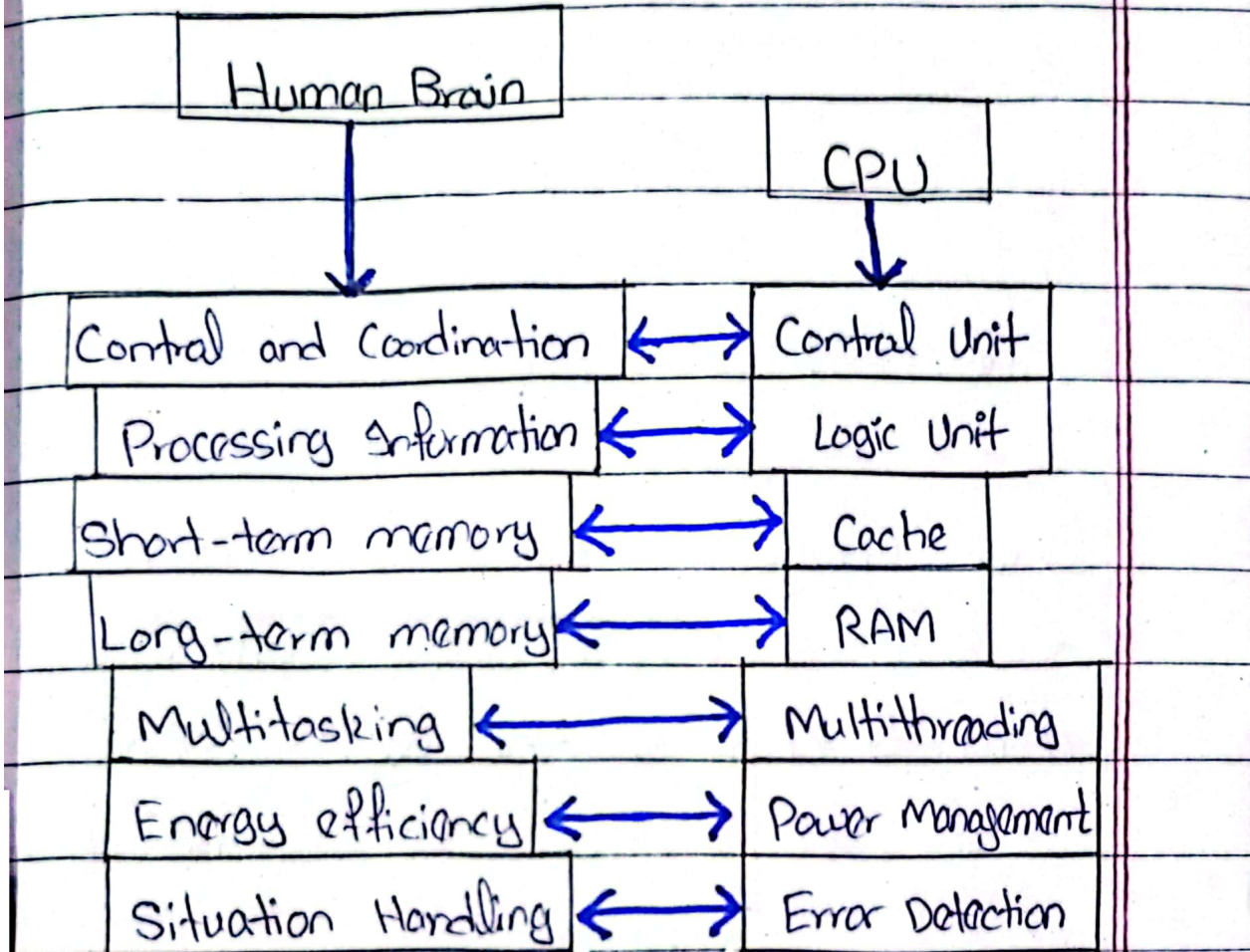
CPU:

⇒ A central processing unit (CPU) is the primary functional component of a computer.

⇒ The CPU is an assemblage of electronic circuitry that runs a computer operating system and apps and manages a variety of other computer operations.

⇒ CPU is often compared to the human brain due to its crucial role in controlling and coordinating functions.

⇒ Here's a flow chart to illustrate how the CPU resembles the human brain in its working.



(c)

Balanced Diet:

A Balanced diet is a diet which includes right amount of all the nutrients such as proteins, vitamins; minerals, fats, carbohydrates etc for proper growth, development and proper functioning of the body.

→ A balanced diet is a diet required for the growth and development of a person especially the children. A balanced diet has direct relation with the health of a person.

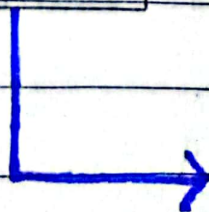
→ The energy requirement is measured in terms of calories. The calorie requirement depends on the age, gender, height, weight, occupation and state of health.

"Let thy food be thy medicine"

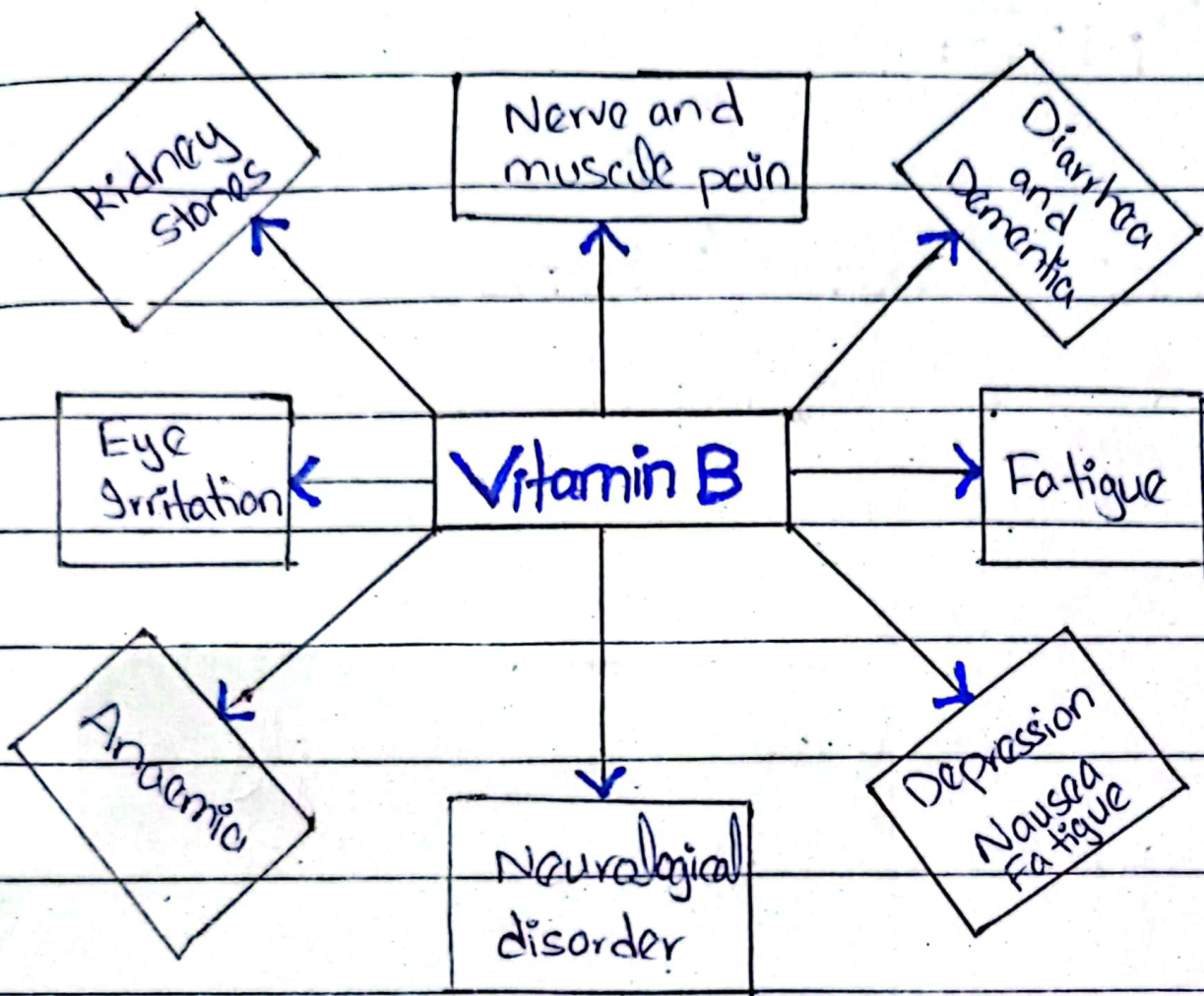
Hippocrates

→ Deficiency of Vitamin A, B and C:

Vitamin A



Night blindness
Permanent blindness
High dose can lead to bone fractures and birth defects



Vitamin C

Breakdown of skin, blood vessels and teeth.

QNO3:

(a)

Ans. Chemical bond

→ Atoms form chemical bonds in order to make their outermost shells complete and more stable. The type of chemical bond maximizes the stability of the atoms that form it.

→ An ionic bond is formed when one atom essentially donates an electron to another atom in order to complete their outermost shell. In the result one atom becomes stable by losing its outer electron and the other atom becomes stable by (filling its valence shell) gaining electron.

⇒ While covalent bond is formed when sharing of electron take place between two atoms. And this results in the highest stability.

⇒ Covalent bond in a Water molecule:

Water molecules are already stable due to the polar covalent bonds within the molecule. A water molecule consists of two hydrogen atoms bonded covalently to one oxygen atom. The oxygen atom shares electrons with the hydrogen atoms to form these covalent bond.

(d)

Ans: Polio:

⇒ Polio is a highly infectious disease caused by a virus. It invades the nervous system and can cause total paralysis in a matter of hours.

⇒ Initial symptoms are fever, fatigue, headache, vomiting and stiffness in the neck and pain.

Eradication of Polio in Pakistan:

⇒ There is much need to stop this infectious disease from Pakistan

but recently the only prevention from this disease is vaccine. Immunization with polio vaccine is the best way to prevent polio

⇒ There are two types of vaccine that protect against polio:

Inactivated Polio Vaccine (IPV)
and Oral Polio Vaccine (OPV)

(b)

Ans. Doping

Doping refers to the use of banned substances in competitive sports. The process of adding some impurities like impurity atoms in a pure semiconductor so as to increase the conductivity of a semiconductor.

Types of Ceramics:

There are two major types of Ceramics traditional and advanced ceramics.

