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Batch-53
MOCK Exams

Part II

Section-I

Q No 5

(a) What is Artificial intelligence and is it possible for artificial intelligence to outsmart humans?

A: Artificial Intelligence:

Artificial Intelligence is the simulation of human intelligence processes by machines, especially through computer systems. AI (Artificial Intelligence) is most commonly used now a days almost AI is used in every field of life.

Example gratia: Meta AI in Whatsapp & Instagram, Chat GPT, voice recognition system, Digital marketing Online Chat box and many more.

Is it possible for AI to outsmart humans?

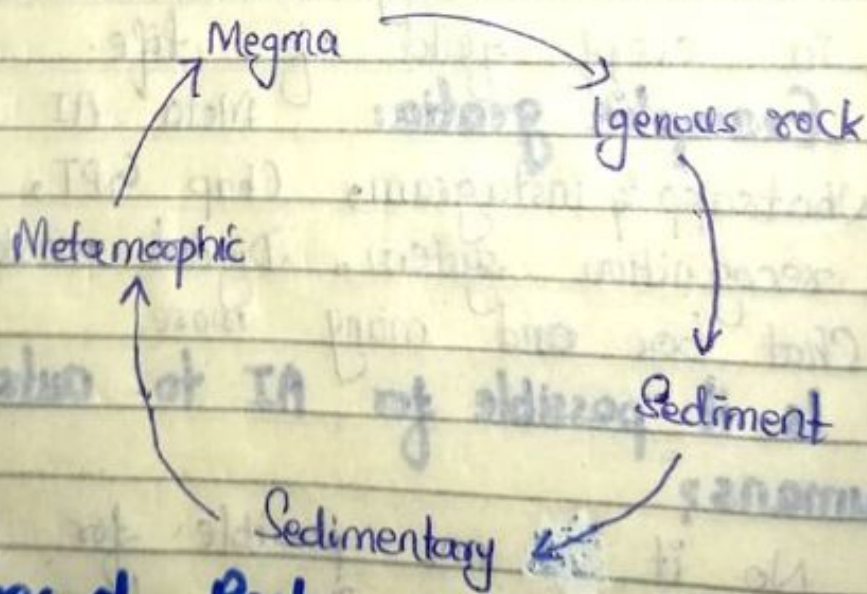
No it is not possible for AI to outsmart humans. Because humans are blessed with extraordinary skills which AI didn't have and it takes a lot of time still it cannot outsmart humans. There are number of ways

through which humans are more intelligent and superior than AI. Humans have emotions, feelings, which AI doesn't have. AI is used widely in the world with its tremendous expertise. It provides convenience to human in number of ways. Still AI cannot outsmart humans.

(b) Define rock formation, rock cycle and different types of rocks?

A. **Rock Formation:** An aggregate form of mineral is called rock formation. Due to weather changes when mineral changes its state it is called as rocks.

Rock Cycle:



Types of Rocks:

There are three types of rocks.

- (i) Igneous Rocks
- (ii) Sedimentary Rocks
- (iii) Metamorphic Rocks.

(i) **Igneous Rocks:** Igneous rocks are formed by the solidification of magma within the surface of earth, and magma as lava on the surface of earth. Igneous rocks are further divided into two per classification.

(i) Intrusive Igneous Rocks

(ii) Extrusive Igneous Rocks.

(ii) **Sedimentary Rocks:** Sedimentary rocks are formed from existing rocks or existing living organism etc. Sedimentary rocks are formed/made with lithification. There are three further types of sedimentary rocks.

(i) Physically formed

(ii) Biologically formed

(iii) Chemically formed.

(iii) **Metamorphic Rocks:** When rocks are given high temperature and pressure they change their shape. These are called metamorphic rocks. It is further classified into three types.

(i) Barial Metamorphic

(ii) Contact Metamorphic

(iii) Regional Metamorphic

(c) What are Carbohydrates and its types?

Ans: **Carbohydrates:** Carbohydrates are the organic compounds that are present in living tissue and food in

the form of starch, cellulose and sugars. Carbohydrates are essential element that are needed for human body. These are included in the balanced diet of human to provide essential nutrients for the body of human. ~~It is~~

Types:

There are majorly four types of carbohydrates.

- (i) Monosaccharides
- (ii) Polysaccharides
- (iii) Oligosaccharides
- (iv) Disaccharides

(d) What are the benefits of balance diet?

Balance diet: A balanced diet contains adequate amount of nutrients that are required by the body for proper functioning such as proteins, carbohydrates, fats, fibre, water, mineral etc.

Benefits of Balance diet:

There are many benefits of balanced diet as given below.

- (i) Better Immune System
- (ii) Weight Management
- (iii) Energy: When people starts over eating or ^{taking} unbalanced diet they become lazy, sluggish but proper balanced diet gives energy for

proper working.

(iv)

Disease protection: Balanced diet helps people to stay away from diseases as unbalanced diet lead humans to many diseases over ~~weight~~ e.g. over weights, heart diseases and many others but balanced diet protect human body from such diseases.

(v)

Improving Mental health:

Balanced diet helps human body as well as improves mental health. When people take adequate amount of food it will help them to improve their mental health issues.

(vi)

Improves healthy ageing: When someone eat without caring about the calories they become fat and started becoming old before their time of ageing. When people take balanced diet they look more younger and ageing affect shown on them with proper age time not earlier.

Q

NO 4

(b) Explain the structure of Sun?

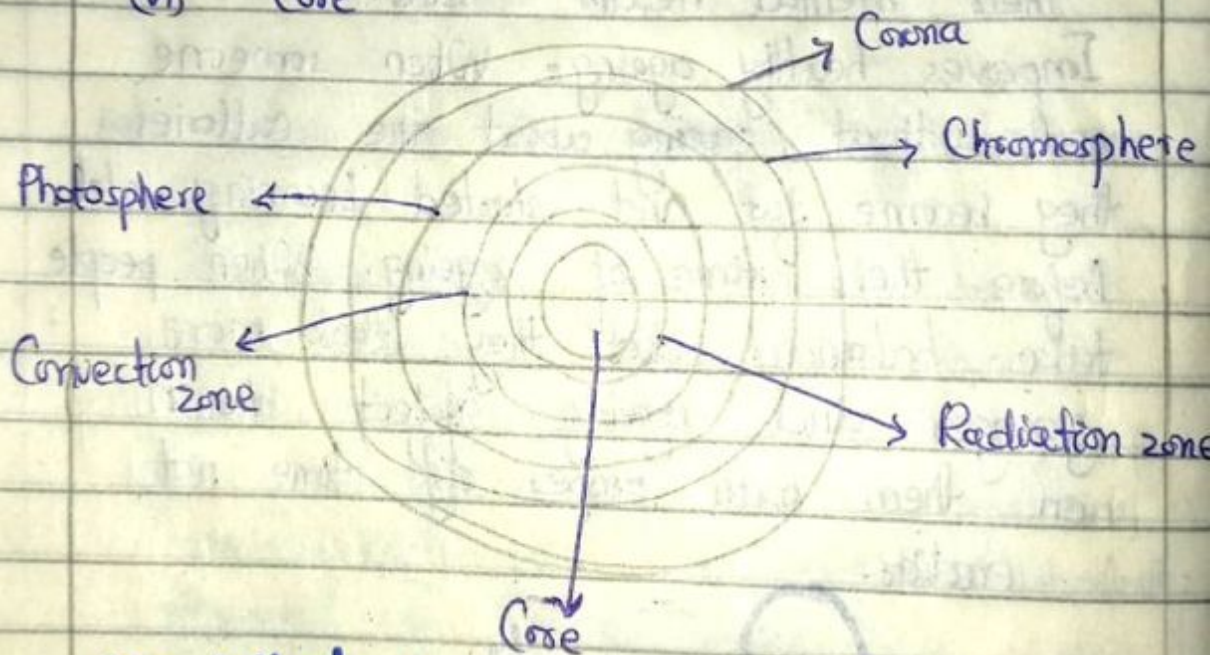
SUN: SUN is the star in milky way galaxy with the age of 4.6 bn years. It is small to medium star. Fusion process continuously happens in the sun. For example two isotopes deuterium and tritium

makes helium called fusion reaction.
Maximum fusion happens in the core
of stars.

Structure of SUN:

The structure of SUN is divided
into 6 layers.

- (i) Corona
- (ii) Chromosphere
- (iii) Photosphere
- (iv) Convection Zone
- (v) Radiation zone
- (vi) Core



(c) What is ceramic material? Is it possible that ceramics can be recycled?

A:

Ceramics:

Clay material that is used for making tiles, kitchen crockery & items etc is called ceramics. It is the most widely and commonly used material. Ceramics are

used in making building, kitchen, industrial sinks etc. Ceramics are made on high temperature and pressure they become solid and strong. They are not bendable they can be cracked.

- The Ceramics are rigid in its nature and cannot be affected by water and air.

- Ceramics requires high melting and boiling point. They maintain their shape for long period of time.

Is it possible that ceramics can be recycled?

Yes, ceramics can be recycled to be used in useful products. But ceramics are durable (means maintain their shape for long period of time) and heat-resistant material which make them challenging to recycle. It requires a lot of efforts and process to crush ceramics and make them useful for recycling.

(d) Draw and explain the structure of Ear. Also label its parts.

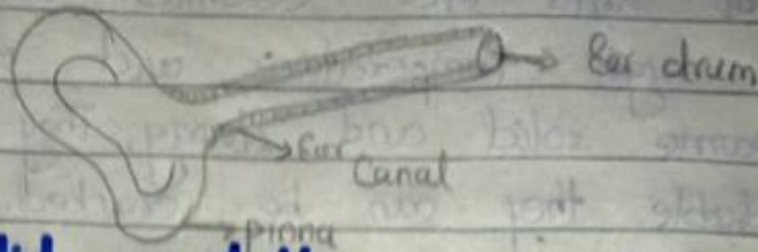
Structure of Ear:

Structure of Ear is divided into three parts.

(i) Outer Ear

(ii) Middle Ear

(iii) Inner most Ear



(a) Enumerate available sources of renewable energy in Pak; and suggest policy options to utilize these sources to overcome the present crisis.

A: **Renewable Sources:** Renewable sources are those that can be generated from natural sources. That can be renew again and again.

Types: There are many forms/types of renewable energy sources. i.e; Solar, wind, Hydroelectric, tides and waves and geothermal energy. Pakistan is blessed with almost maximum of the renewable resources. That could help Pakistan to resolve its energy crisis.

Suggestions:

- Better policy making should be carried out for renewable sources.
- Government should play its important role in renewable energy sources.
- Technological advancement are required to get fruitful

effect of renewable sources that Pakistan have in major/huge amount.

- Proper reform in energy sector to deal with energy crisis by using these renewable energy resources.
- Govt should promote people to generate electricity via solar panel instead of apply heavy duty on solar panel.