

Q2

## A) Renewable Energy

### Introduction:

Renewable energy resources are those sources which makes energy without burning of fossil fuel. Further, this mechanism of producing energy is categorically known as renewable energy where energy can be obtained <sup>time and</sup> again.

Its sources are tidal energy, wind energy, solar energy, thermal energy and the list goes on.

Moreover, solar energy is the energy that is obtained from sun rays which is utilized by the human beings as alternate source of energy vis a vis energy obtained from fossil fuel or nuclear reactor.

### Importance of renewable energy with respect to environment

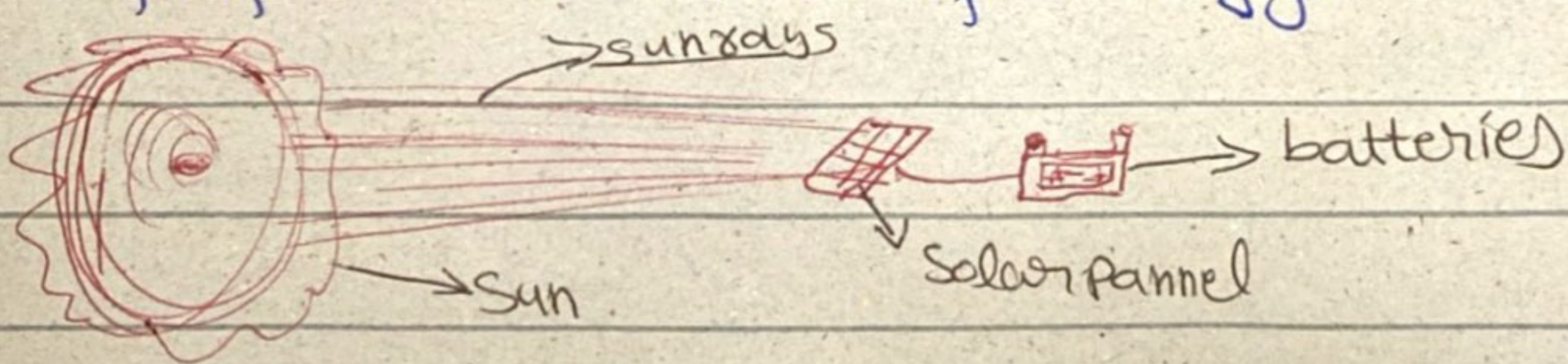
The importance of renewable energy is that it causes no harm to climate change. Further, it is clean energy that is obtained from the nature in various ways. Similarly, this cost of renewable energy if compared with traditional sources of energy generation is way more low in terms of capital.



Further, with respect environment it is significantly environment friendly. Release of renewable energy is also termed as green energy. Owing to this reason, the world is in transition towards renewable energy.

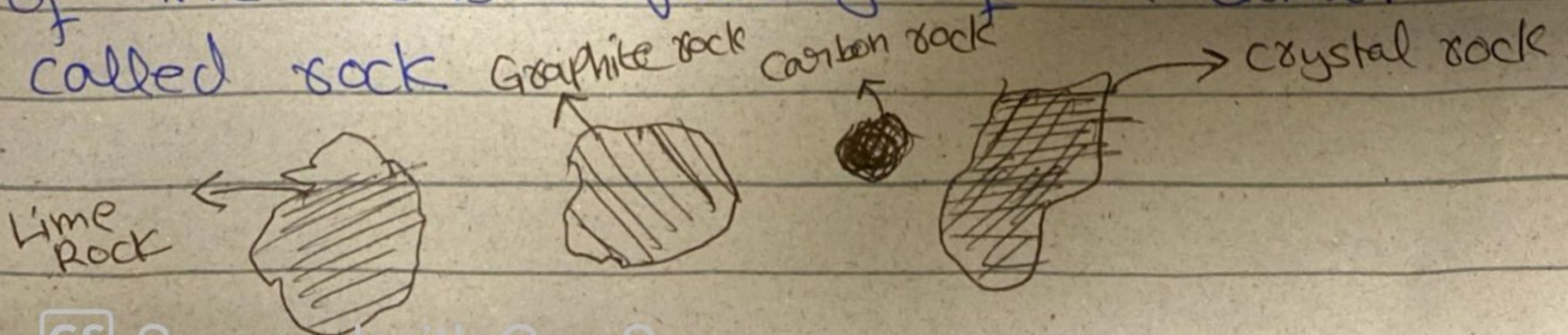
## Solar energy - Renewable Energy

Solar energy is the energy obtained from solar rays directly. This energy is obtained via solar panel, where solar panel store energy in batteries. Moreover, this stored energy is utilised later on in order to fulfill the need of energy.



## B.) Rocks :

Rocks are solid material that are made of various items of elements. The way these elements combine into a solid form. This solid structure that is the combination of the excessive quantity of an element is called rock.

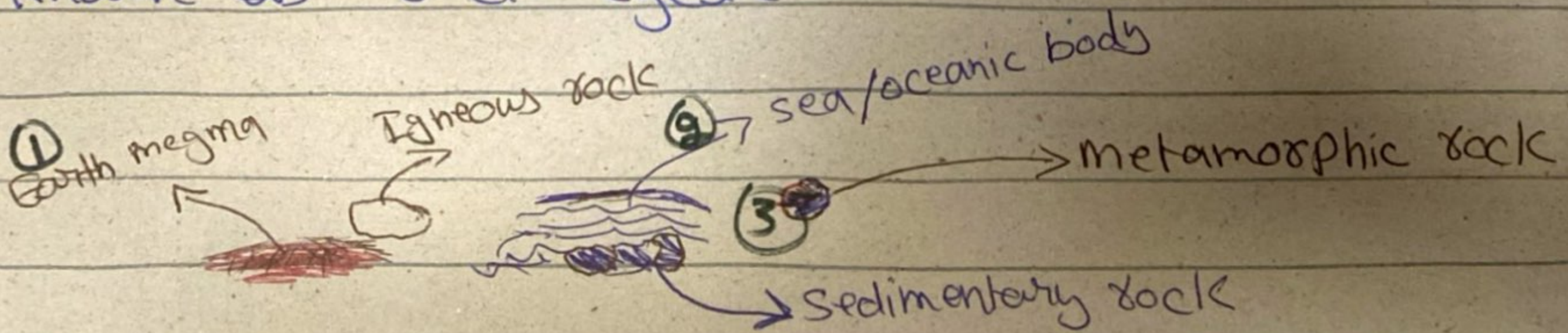




## Types of Rocks + Rock cycle:

The rocks are basically of three types  
1) Igneous rock 2) Sedimentary rock 3) Meta-  
-morphic rock. These three are the basic  
form of rock when rock evolve from one  
form to another this cycle is known as rock  
cycle. However, igneous rocks are formed  
after the molten material beneath the  
earth cool down. Resultantly, that cool down  
material form into rock this rock is known  
as igneous rock. Secondly, sedimentary rocks  
are formed due to fossils or water bodies  
beneath the water. Thirdly, metamorphic rocks  
are formed by the transition and heating  
of sedimentary rock.

Whereas this cycle of transition from  
one form of changing to another form is  
known as rock cycle.



In fact, the transformation of metamorphic  
rock due to severe heat converts it back to  
igneous rock. This complete cycle is rock cycle.

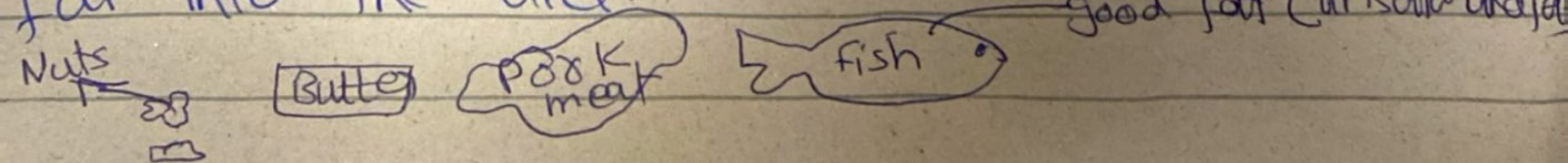


## c) Saturated and unsaturated fats

Saturated and unsaturated fats are those fats which are important for the survival of human being. Therefore, saturated fats are those fats which contain extreme fat or also known as unhealthy fat. These elements that contain fatty fats or saturated fats are the following. Butter, Fatty meat, Pork, Peanut Butter, Lamb fat. However, unsaturated fats are those fat which is pivotal for human beings. These fat is also known as good fat. They are found in Nuts, oil, plants, fish, chicken and the list goes on.

## Importance of saturated and unsaturated fats

The importance of saturated and unsaturated fat is that both are extremely pivotal for human being survival. As human being obtain energy from both the fats. But, unsaturated fat is known as good fat this is healthy fat for one. In fact, doctors also focuse on the addition of unsaturated fat into the diet.





## D) water soluble vitamins:

water soluble vitamins are all those vitamins those cannot store in human body. However, they are mandatory in order to maintain balance diet. Therefore, water soluble vitamins need to be added to the diet. These vitamins are found in fruits, juices and many other natural elements. For example, vitamin B<sub>1</sub>, B<sub>11</sub>, B<sub>6</sub>, all of them are water soluble vitamins. Moreover, water soluble vitamins are found primarily in the fruits those who are in liquid form. Such as nectar, orange, raspberry.

Q 3

## Vaccines:

Vaccines are a fluid that contains antibodies, which is utilized in order to counter the disease. The vaccine was invented for the first time by Edward Jenner. He invented the vaccines of rabies. Since the invention of vaccine, it has significantly perpetuated. Moreover, vaccines contain anti-bacteria in order to counter the virus and strengthen the immune system against the virus that exist in the body. Therefore, there are



there are hundreds of vaccines invented in order to mitigate the disease and strengthen the immune system. For example, corona virus disease was curtailed by the vaccines that had the potential to counter the corona virus in the human body.

### B) Balanced diet:-

Balanced diet is that which contain each and every ingredient that is essential for human body. This kind of diet is collectively known as balanced diet. Further, healthy body maintenance categorically require balanced diet. Moreover, body builders maintain their body owing to the balanced diet that they continue. Indeed, doctors also recommend that one's diet should be balanced in a way in order to stay fit and healthy.

### Merits of balanced diet

The merits of balanced diet are that it keeps the body healthy. Also, healthy diet helps the body to prevent the virus or bacteria. Moreover, the immune system becomes strengthen. Moving forward, one's health does



not get impacted by maintaining balanced diet. Overall, balanced diet is significantly energizer for the body. That's why the body's diet should be maintained balance in order to have healthy life style.

### c) weaknesses in disaster Risk management

Pakistan is significantly prone towards the disaster risk management. Owing to its location, as well as dwindling economy Pakistan is significantly vulnerable towards the disaster risk management. Therefore, after each and every disaster, Pakistan faces human losses, economic losses, infrastructure losses and the list goes on. The way Pakistan did billions of dollar loss in the 2022 floods, where almost thousand plus people died. In fact, Pakistan is weak when it comes to disaster risk management.

### weaknesses in disaster Risk management

The very first weakness is that Pakistan does not have updated technology owing to which Pakistan can predict the arrival of disaster. Secondly, the institution national disaster management in itself is uncompetitive



where they cannot tackle the disaster in letter and spirit. Thirdly, Pakistan is in the quagmire of corrupt practices by the number of individuals those who do not want the institutions to work in letter and spirit. Therefore, their corrupt practices are same as wood is to termite. So, the credibility is significantly weakened. Lastly, disaster risk management is also failed owing to lack of funds, where the government is unable to invest in this sector due to the economic woes of Pakistan.

#### D) Carbohydrates:

Carbohydrates are the essential elements that is required by our body. These carbohydrates are formed by the breakdown of energy in our body. Therefore, there are primary carbohydrates and secondary carbohydrates. Moreover, carbohydrate as known from its name, is made of carbon, hydrogen and oxygen. Where all these three elements are fuse together together they are known as carbohydrates. They provide energy to our body. Also, glucose, fruits, nuts, milk, they are present in almost every product that human consume. Especially, in potato that is known as house of the carbs. Overall, carbohydrates are important for the human body.