

Q NO-2

16.5/40

Be in Disussion  
class

(A)

Good fats and bad fats  
and examples

Good fats:

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These are those fats that are important nutrients for human body. They provide major source of energy to body. They do not have harmful effect. Therefore, they are called good fats.

Bad fats:

These are those fats that are considered harmful for human body. They rather than providing energy to human body, they negatively affect it. So, these are termed as bad fats.

Differences

(i) Effect:

Good fats have no bad

on human body. While, bad fats are harmful.

(ii) Energy:

Good fats provide energy to human body. However, bad fats are source of diseases.

### Examples

① cholesterol is a bad fat.

② OMEGA-3 is a good fat.

(→)

(D)

### Food Preservation Methods

Food preservation:

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Food has nutrients that provide energy to human body. However, these nutrients can be destroyed or spoiled by microbes or oxidation. So, different methods have been adapted to preserve food from deterioration.

### Methods of preservation

① Pickling:

It is a process in which

The food is heated. The heat kills microbes. So, nutrients of food are saved from microbes.

### ② Canning:

The canning method is that in which food is kept in cans. The cans provide protection to food from deterioration. Oxidation does not take place.

#### Example:

Half of an apple in a can to prevent oxidation process.

### ③ Pasteurisation:

In this process, food is heated and promptly cooled down. The microbes get killed or halted. Thus, food is preserved.

### ④ Drying:

There are certain types of foods that are dried for preservation. Due to drying, microbes do not have water for their survival. They get killed and food is preserved.

### ⑤ Salting:

Salt is also applied on food, to preserve food. For instance, salt on meat

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## Food adulteration effects and solutions

Food adulteration:

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Food adulteration means that certain substances are added to food which lower its nutritional effect. They can also turn that food as harmful for human body.

Example:

chemical or water added into milk.

### Effects

① Lack of balance diet

Food adulteration leads to unbalancing of diet. One can not receive required nutrients for one's body in a day.

② Diseases

Food adulteration also causes diseases. Milk mixed with chemical

These counterproductive results  
for human body.

### Solutions

#### ① Accountability

Those who are involved  
in food adulteration  must  
be held accountable. This  
act discourages others to  
do such activities.

#### ② ~~Consumer~~ Awareness

Masses should be educated  
through media to  not buy  
food from those who  
are involved in the  
practices of food adulteration.

#### ③ Morality

It should be taught  
in society that food  
adulteration  is wrong.  
This practice can also  
help control food  
adulteration.



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Uses

(i)

Vitamin B-complex

- ① Fight off Beri-Beri disease
- ② <sup>B<sub>3</sub></sup> It ~~helps~~ helps ✓ to fight off pellagra disease.
- ③ This vitamin (Vitamin B-complex) provides energy.
- ④ It also helps in fertility.

(ii)

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Vitamin E

- ① It prevents sterility ✓
- ② It provides energy

(iii)

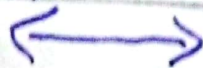
Vitamin D

- ① It prevents rickets in children.
- ② It also prevents ✓ osteomalacia in adults.
- ③ It also provides energy

(iv)

Iron

- ① It helps to fight off Anaemia
- ② It also provides energy



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## Vaccine and Antibiotics and their differences

### Vaccine:

It is a substance that is used to prevent diseases. It was invented by Edward Jenner.

### Antibiotics:

These are substances that are used to fight off microorganisms.

### Differences

#### Vaccine

① It is used to prevent disease that has not occurred.

② It is used against viruses

③ It usually has no side-effects.



#### Anti-biotics

① It is used to kill microorganisms that have already caused disease to human body.

② It is used against bacteria

③ It can have side-effects like Diarrhea, Stupor, dizziness, headache etc

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## Galaxy

### Definition

Galaxy is a celestial body in universe. The universe might have have several galaxies.

### Types of Galaxy

#### ① Spiral

Some of galaxies that are spiral in shape.

#### ② Elliptical

Some galaxies are in elliptical form or shape.

#### ③ Spherical

Spherical galaxies have also been found in universe.

### Galaxy and our earth

Our earth is part of milky way galaxy. The other galaxy near to our earth is proxima.





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## DRM

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### Definition:

DRM stands for disaster risk management. It aims at reducing the major risk that is posed by natural disasters to human lives.

### Explanation:

DRM is a technique of response by human beings to avert the disaster that is brought by nature. Humanity has faced many natural disasters in history. Therefore, DRM concept came to their mind to reduce the risk posed by natural disaster.

## DRM and Pakistan

Pakistan has following DRM at both national and provincial level.

NDMA: It stands for National disaster risk management authority.

### PDMA,

Provincial disaster risk management authority.

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## cyclones, Tsunami and typhoons

**cyclones:** ✓

It is a tropical storm in which winds blow in a circle.

**Tsunami:**

It is an abnormal ✓ sea wave in the ocean.

**Typhoons:**

It is a violent tropical storm.

## Differences

| cyclones  | Tsunami                          | typhoons                                     |
|---|----------------------------------|--|
| ① It occurs in tropics of Southern hemisphere ✓ | ① It can occur in any ocean. =   | ① It occurs in tropic of Northern hemisphere |
| ② It occurs due to winds                        | ② It occurs ✓ due to earth-quake | ② It occurs ✓ due to winds.                  |

