

Part II

∴ SECTION : I ∴

QUESTION NO: 1:

Data is the new oil" Do you agree?

Justify with your simple opinion and 3 everyday example

∴ ANSWER ∴

• INTRODUCTION:

In today's world, data holds a prime important importance when it come to Global market and industrialization, which replace the former resource oil-

• Explanation:

In 19th Century, ~~when industrialization~~ is the era of industries, while main source to run industries at that time was oil- Machines which manufacture needed oil- the products it make e.g. cars also run on oil, while on the other hand in the

Contemporary era the most important resource is data, which replaced the former one oil-

⇒

As every, ...

World has digitise, and to continue with it the fuel we need is data. Today all the companies, Government and countries use the data for their personal use, which become impossible to live without.

-: Examples:-

-: Algorithm:-

Algorithm is a system in which individual history, search, likes, and browsing habits are track in order to present him the content or material he like. This following process help companies to advertise their product as according to the liking and demand need of user. All of this system run on data of individual, and work for everyone through out the world.

Daily life examples:-

→ 1. On Line - Shopping :- Online shopping these day is one time of the handy invention and the core principle of this rule again is algorithm which is being feeded in "data"

→ 2. Watching Content:-

Social media websites like TikTok, Youtube, Instagram collect the information, watch

you like and dislike regarding specific content and the time duration you watched them for, then they will suggest you similar content.

Thus keep me busy and ~~increasing~~ increased used of certain apps.

Example 3

Not only Companies but Government also, use algorithm from from apps like Twitter & Facebook in order to capture one interest and spread Propaganda regarding their position. These Propaganda fuel anger and enthusiasm in individual. Thus ~~help~~ it become easy for them to mold people the way they ~~are~~ are.

Conclusion:

In conclusion, Social Media apps Shopping websites and government are the giants of today's economy and they run on ~~this~~ this economy on "Data".

: Question 1:- Part B:-

Universe is expanding how does it resemble a
balloon blowing in working?

: UNIVERSE:-

Our universe is 14.6 billion years, which
~~years~~, earlier was small than the size of pin-head.

called totality.

: Big-Bang:-

Big Bang was the explosion in the
totality of universe, which is the prime-
reason of expansion of our universe.

Due to that massive explosion our
universe is still expanding, which can be
considered as prime and yet a continuous
source of expansion of our universe.

: Resemble with a balloon:-

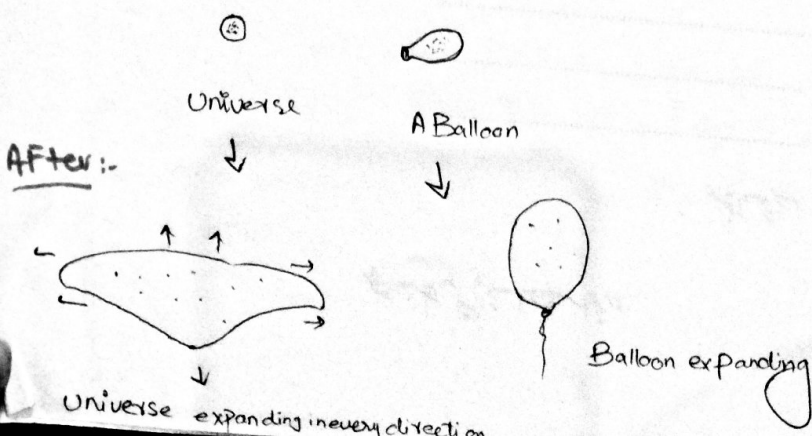
A balloon when it is in original
form and not extended by any external
force can be resemble with the galaxy
before big bang.

∴ Explination:

Consider some time dots on the Surface of Balloon, before Balloon is blown all these dots are very close to each other, almost merging into each other, but ^{when} any external force is provided or air is blown in the Balloon it will start its expansion and all the dot will move away from each other, Similar is the process of universe, it was initiated by big bang where stars, and galaxies cluster were very close once it start expanding every object started moving away from other.

∴ Visual Representation:

∴ Before expansion:



∴ Second Resemblance:

Another resemblance both show is the constant expansion and in every direction, both universe and balloon expand with constant rate and expand in every possible direction.

∴ Conclusion:

In conclusion, Balloon is the example which shows how the expansion of universe occurs.

∴ Part 3 ∴

∴ QUESTION ∴

What do you mean by Balance diet? Deficiency of Vitamin A, D, E can result in to which type of imbalance in human body?

∴ ANSWER ∴

A Balance diet is refer as a diet that contains all major and minor nutrients in the balanced portion.

Macro-
Nutrients:

Major nutrients that our body need are Protein, Carbohydrate, fibers, Fats (lipids), water etc.

Micro-Nutrient Macro nutrients are "Vitamin and minerals"

If all the above mentioned nutrients are provided to the body via food in a balance way according to need of body we call it balanced diet.

Importance of vitamin:-

Vitamins in our body are divided into Fat Soluble vitamins and water soluble vitamins.

Classification

Water Soluble:

- Vitamin (B)
- Vitamin (C)

Fat-Soluble:

- Vitamin A
- Vitamin D
- Vitamin E

These vitamins are micro-nutrients of our body which means they are needed in our body in a very small amount, but it doesn't mean that these vitamins are not required at all.

Vitamins help our body in functioning properly.

Deficiency of vitamins:

Deficiency of vitamin can lead to imbalance in body's function, cause disease and can lead to weak immune system.

Here we are going to discuss

Fat-Soluble Vitamins

- Vitamin A
- Vitamin D
- Vitamin E

∴ Vitamin A:

Deficiency of "Vitamin A" can cause Eye sight issue, weak immune system, skin issue & growth issue.

- * It can lead to night blindness
- * It is the main reason of dry eyes in many adults
- * It is the main factor of retardation of growth in growing kids
- * It also weakens your immune system.
- * It also causes skin dryness.

∴ Vitamin D:

It can disturb the storage of calcium weak bones and muscle weakness.

* Its deficiency can lead to the problem in storage of Phosphorus and Calcium

* Phosphorus and Calcium content are imp to be in body for the strong bones, which in present could cause rickets and osteoporosis in kids and adults

* It also halt the muscle growth in body

> Vitamine E :-

Deficiency of Vitamine E could cause Reproductive problem in human body

It can cause anemia

can also cause neuromuscular problems

Also damage our cell membrane

also, the amount of oxidant in the body also increase

: Section II:

: Unscramble the terms:

1 - STSTAICITS = STATISTICS

2 - LGEBMAR = ALGEBRA

: Question: 2:

A Dicycle cover 36 km at 18 km/hr starting at 1 pm. what time does it reach.

: Data:

Total distance covered = 36 km

Distance cover in 1 hour = 18 km

Time journey started = 1 pm

: Solution:

what time he reach.

Distance travel

- 1 pm to 2 pm = 1 hour = 60 min = 18 km
- 2 pm - 3 pm = if we add another 60 min, it will add another 18 km.

: Steps:

• 1 - 3 pm = 60 + 60 min = 18 + 18 km

• 1 - 3 pm = 120 min = 36 km

: ANSWER:

- Thus in 120 min which is 2 hours from 1 to 3 pm was the time duration in which

36 km was covered.

Question 3:

A ~~camera~~ ~~man~~ ~~p~~

A camera priced at 200\$ gets 25% off and 6% tax, calculate the total amount.

Given Data:

Price of camera = 200\$

Discount on camera = 25%

Tax on camera = 6%

Required Data:

original price in which camera is bought = ?

Solution:

- 25% off on 200\$ are = 150\$

- Now if we add 6% tax on 150\$

- To find 6% of 150\$ we know

- $\frac{6\%}{100} \times 150 = 6.0$

$\Rightarrow$ Now add 6.0 in 150 it will be = 156\$

ANSWER:

Thus price at which camera has bought is 156\$.

Part I Question 7

Calculate volume of a sphere with diameter of 14cm.

Given:

Diameter of sphere = 14cm

$$\text{Formula: } V = \frac{4}{3} \pi (r)^3$$

Required:

Find the volume.

Solution

Formula of volume for sphere is

$$V = \frac{4}{3} \pi (r)^3$$

$$V = \frac{4}{3} \cdot \frac{22}{7} (?) \rightarrow (1)$$

To find the radius we use following formula

$$r = \frac{d}{2}$$

$r = \frac{14}{2} = 7$ Thus radius is 7 & put it in equation (1)

$$V = \frac{4}{3} \cdot \frac{22}{7} (7)^3$$

$$V = \frac{4}{3} \cdot \frac{22}{7} (443)$$

$$V = \frac{19492 \cdot 38986}{21} = \boxed{1856 \text{ cm}^3}$$

Part II:

c- Spot the error / Complete the series:

• 2, 6, 18, 54, 162, 486 (None)

• 35, 7, 11, 13, ~~15~~ 17.