## I'd number 16463

Course Title: Biochemistry I

Summer Semester Instructor: Sana khan

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Note: There are FIVE questions, each carry 10 marks with grand total of 50 marks. ATTEMPT all questions.

Avoid copy paste material from any source, as it may deduct your marks.

Max Marks: 50

Q1: How Fat soluble vitamins are absorbed by the body.

Ans 1

Fate soluble vitamins absorbtion

\*the absorbtion of fat soluble mechanism is same as other lipid

\*Absorbtion take place in small intistain

\*these vitamins not absorted directly into the blood stream.

\*but they are absorbed into the lectal in the small intestin via chylomicrons

\*And transported through lymphatic system and release into the blood stream.

Q2: Classify the BLOOR classification of lipids, discuss fatty acid and its types.

Ans 2

Bloor classification of lipid

According to the bloor classification lipid are classified into three groups

\*simple lipoid (fats and waxes

\*compound lipoid (phospholipoid, glycolipoid)

\*derived lipoid (fatty acid ,alcohal ,sterol)

**Fatty Acid** 

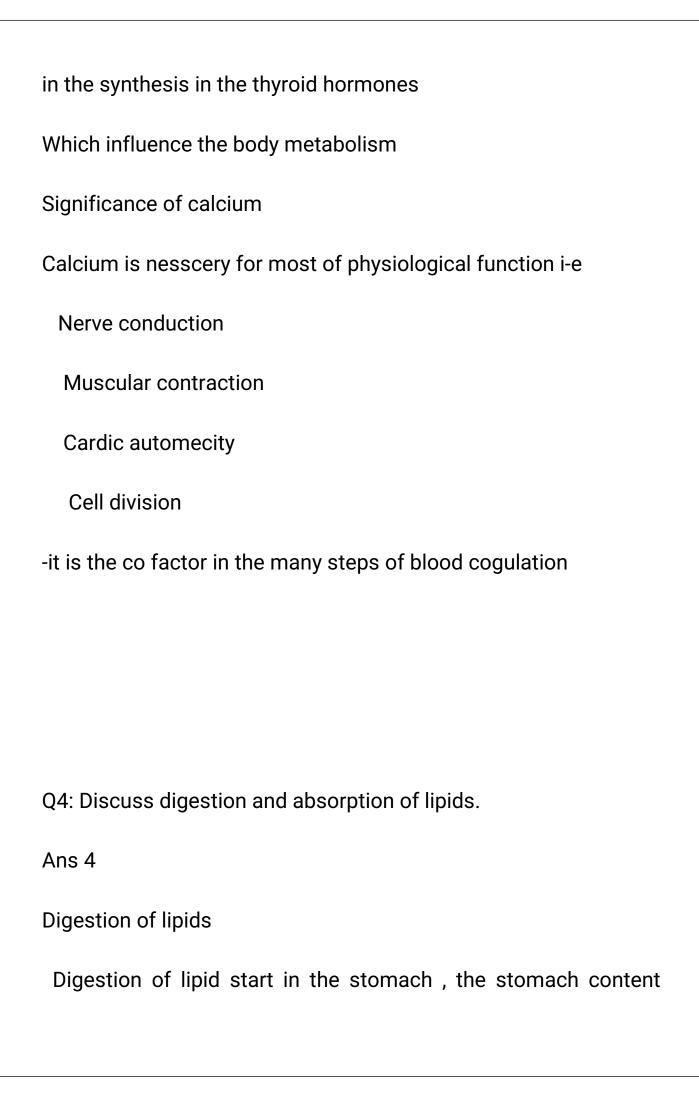
Fatty acid are straight chain of even numbr of carbon atoms, with hydrogen atoms along the lenght of chain atone end and corboxyl group at the other end

Classification of Fatty Acide

- -Saturated fatty acid
- -Unsaturated fatty acid:

Monounsaturated
Polyunsaturated
Essiential fatty acid
Q3: Write down the biological significance of any 5 essential
minerals.
Ans 3
Significance of Zinc
-Zn found through out the body cells
-it is needed for the body defensive system to work properly
-it play importan role in
Cell division
Cell growth
Wound healing

## And break down of carbohydrates Significance of copper -Cu play's in important role in our metabolism -copper maintain the strenght of Skin Blood vessle Epithilial tissue And conective tissue Significance of Iron -it is important for the: Oxygen transport **Energy production Immunity** Cognitive function Significance of Iodine Most important role of iodine in our body as help in the synthesis



have emulsifed fat breaking, enzymes been work on

triacylglycerol and diacylglycerol to sever fatty acid from their

glycerol foundation.

As the pancreatic lipase enter into small intestin it break down

the fate into the free fatty acid and monoglycerides

**ABSORPTION OF LIPID** 

It is absorbed from small intestine

-lipid is take by lectal in small intestin

-transport through the lymphatim system

-the lymphatic give lipid into the blood stream amnd blood

transport it into the different parts of the body

Q5: Briefly explain function, sources and deficiency symptoms of

following vitamins: ans 5

Retional .....

Sources of retinol
Animal source
Fish, meat , liver
Plant source
Green vigetable , carot
Function of retinol
Help in mantainins of
Teeth
Fertility
Connective tissue
Mucus membrans
DEficincy symptom
Xerophthalmia
Nieght blindness
Thiamine
SOURCES OF thiamin

Includ ...grain, meat ,fish ,breads and cereales

It helpes in the body change energy

-rule in the carbohydrates to provid energy into the body parts especially to the brain

-Also help in the muscle contraction ,nerve conduction

**DEFICIENCY SYMPTOM OF THIAMIN** 

-bariberi

Pyridoxin.....

SOUFCES OF PYRIDOXIN

Pork, meat, fish, peanuts, grain and oats

SIGNIFICANCE OF PYRIDOXIN

-it needed for the healths of nerves, skin, and red blood cell

-it is use in certaint treatment

**DEFICIENCY SYMPTOMS** 

Periphral neuropathies

