

# SSR DEGREE COLLEGE AUTONOMOUS NIZAMABAD

## PG SEM-2 INTERNAL -1

M.SC (NUTRITION & DIETETICS)  
SUB: NUTRITIONAL BIOCHEMISTRY  
QUESTION BANK

### I. Multiple Choice questions

- Hydrocarbon chains are \_\_\_\_\_  
a) Lipids      b) Proteins      c) Minerals  
d) Vitamins
- B-oxidation takes place in \_\_\_\_\_  
a) Lysosome      b) Mitochondria  
c) Plasma membrane      d) None
- Insulating material for maintain the body temperature in animals \_\_\_\_\_  
a) Proteins  
b) Carbohydrates      c) Lipids      d) Dna
- Neutral fat is \_\_\_\_  
a) Cholesterol      b) Sphingomyelin      c) Triglycerides  
d) None
- Most of the fat stored in \_\_\_\_\_  
a) Adipose tissue  
b) Liver      c) Brain      d) Kidney
- Main substrate for fatty acid synthesis\_\_  
a) Glycerol      b) Acetyl-CoA      c) Try glycerol      d) Protein
- Total no. of ATPS produced by the oxidation of a molecule of palmitic acid is \_\_\_\_\_  
a) 120      b) 129      c) 168      d) 200
- Following substance is ketogenic \_\_\_\_\_  
a) Fatty acid      b) Protein  
c) Carbohydrate      d) Electron
- The reducing equivalent (NADPH+H<sup>+</sup>) are supplied by \_\_\_\_\_  
a) EMP      b) HMP      c) TCA      d) ED
- Permissor for bile acids \_\_\_\_\_  
a) Fatty acid      b) Glycerol  
c) Lipids      d) Cholesterol
- Chylomicrons are synthesized in \_\_\_\_\_  
a) Stomach      b) Intestine      c) Mouth      d) in food
- Energy currency of the cell \_\_\_\_\_  
a) ATP      b) NAD      c) FAD      d) NADPH
- Lipid deposition disease is \_\_\_\_\_  
a) Gaucher dis      b) Taylach's dis      c) Feby's dis      d) All the above
- Which of the following vitamin functions as both, hormone and visual pigment \_\_\_\_\_  
a) VitA      b) VitD      c) Vit k      d) Vit E
- Which of the following is a fat - soluble vitamin \_\_\_\_\_  
a) Folic acid      b) Riboflavin      c) Vit C      d) Vit K
- Which of the following is the scientific name of Vitamin K \_\_\_\_\_  
a) Ascorbic acid      b) Riboflavin      c) Phytonadione      d) Tocopherol

17. The main site of lipid metabolism is: \_\_\_\_\_

A) Brain

**B) Liver**

C) Kidney

D) Heart

✓ Answer: B

18. The process of breakdown of fats is called: \_\_\_\_\_

A) Lipogenesis

**B) Lipolysis**

C) Glycolysis

D) Proteolysis

✓ Answer: B

19. Lipogenesis means: \_\_\_\_\_

A) Breakdown of fat

**B) Formation of fat**

C) Breakdown of protein

D) Formation of glucose

✓ Answer: B

20. Obesity is defined as: \_\_\_\_\_

A) Low body weight

**B) Excess fat accumulation**

C) Protein deficiency

D) Water retention

✓ Answer: B

21. BMI > \_\_\_\_\_ indicates obesity: \_\_\_\_\_

A) 18.5

B) 22

C) 25

**D) 30**

✓ Answer: D

22. Major cause of obesity is: \_\_\_\_\_

A) Infection

B) Hormones only

**C) Excess calorie intake**

D) Vitamin deficiency

✓ Answer: C

23. Cachexia is: \_\_\_\_\_

A) Excess fat accumulation

**B) Severe weight loss and muscle wasting**

C) Bone disease

D) Water imbalance

✓ Answer: B

24. Cachexia is commonly seen in: \_\_\_\_\_

**A) Cancer**

B) Fever

C) Cold

D) Minor infections

✓ Answer: A

25. In cachexia, appetite is usually: \_\_\_\_\_

- A) Increased
  - B) Normal
  - C) Decreased**
  - D) Unchanged
- ✓ Answer: C

## II. Fill in the Blanks.

- 1) Expand TG Try glylerides
- 2) Cholesterol synthesis is controlled by Feed back inhibition
- 3) Fatty acid biosynthesis is occurred in Liver, kidney
- 4) Lipid deposition disorders are Goucher's Febre's niemann's dis
- 5) Expand ACP Acyle carrier protein 6) Carnitine is a carrier protein
- 7) Expand VLDL Very low deneity lepopeotin
- 8) Niemann pick disease is due to defect in the Enzyme Sphingomyelinase
- 9) Expand HMGCoA Hydroxyl methyl glutaryl cone
  - 10) TCA cycle Is a final metabolic path way of for the oxidation of all foodstuffs
  - 11) Central metabolic clearing house is Liver
  - 12) Blood glucose buffering organ is Liver
  - 13) Lipotropic factors include Inositol, betaine, methiorine
  - 14) Lack of lipotropic factors leads to Fatty liver
  - 15) Major bulk of body protein located in Muscle
  - 16) Tocopherol is a antioxidant and is Vit E
  - 17) Sunshine vitamin is Vit D
  - 18) Metabolism of carbohydrates, lipids, proteins is integrated to meet Energy
  - 19) Vitamin K is stored in Liver
- 20) Expand HMP Hexose momophosphate pathway
21. Lipid digestion mainly occurs in the \_\_\_\_\_ with the help of bile salts.  
**Answer: Small intestine**
22. The enzyme responsible for fat digestion is \_\_\_\_\_.  
**Answer: Lipase**
23. Bile is produced by the \_\_\_\_\_ and stored in the gallbladder.  
**Answer: Liver**
24. During absorption, fatty acids and glycerol are reformed into \_\_\_\_\_ in intestinal cells.  
**Answer: Triglycerides**
25. **Hyperlipoproteinemia** is characterized by increased levels of \_\_\_\_\_ in the blood.  
**Answer: Lipoproteins**

## III. Descriptive Questions

1. Define Lipid Explain classification sources and functions
2. write about Digestion and absorption, Deposition and storage
3. Briefly discuss about Oxidation of fatty acids
4. Write about inborn errors of lipid metabolisms
5. write about Fat soluble vitamins