1. What are lipids? What are the types of lipids? Examples of simple lipids, complex lipids
2. What are fatty acids? What are the types of fatty acids? Describe the structure and functions of fat, ketone bodies, triglyceride, phospholipids, glycolipids, sphingolipids, ceramide, cholesterol, very-low-density lipoproteins, intermediate-density lipoproteins, low-density lipoproteins, high-density lipoproteins, chylomicrons
3. Describe the lingual lipase, gastric lipase, pancreatic lipase (type of enzyme, what happens in the reactions, substrate, product, role in digestion of lipid). Describe the digestion of lipids in the intestine (type of reaction, what happens in the reactions, enzyme, substrate, product). Describe the lipid absorption in small intestine. Describe the role of bile acids and salts in lipid digestion. How does deficiency of bile acids affect the body?
4. Describe cholesterol synthesis, β-oxidation, synthesis of fatty acids, lipogenesis, lipolysis, ketone body synthesis, ketone body degradation, glycerol degradation (types of reactions, what happens in the reactions, enzymes, substrates, production, how many ATP molecules are used or formed).

5. How does insulin affect lipid metabolism? How does glucagon affect lipid metabolism? What is hypolipidemia? What are its reasons? What is hyperlipidemia? What are its reasons? What is the role of carnitine in lipid metabolism?