## TEST for CHAPTER 1

Question 1. Choose the correct structure of palmitic acid.

Question 2. Choose the structure from the right that is correspondent to the word in the left.

Question 3. Choose the structure from the right that is correpondent to the word in the left.

Question 4. Prostaglandines are divided into three types, type I, II and III. Choose the correct precursor for each type of PG.

1. type I prostaglandins

A. \_\_\_\_\_\_

2. type II prostaglandins

B. OH

3. type III prostaglandins

C. OH

Question 5. Answer the trivial name of the following fatty acid.

Question 6. Choose the correct one which indicates the following fatty acid.

1.  $22:6 \omega - 3$ 

2.  $22:6 \omega-4$ 

3.  $22:6 \ \omega - 6$ 

Question 7. Choose the correct explanation for the following compound.

1. This compound is prostanoic acid, obtained from sesami oil.

 $2.\,$  This compound is oleic acid, obtained from olive oil.

 $3. \,$  This compound is mevalonic acid, obtained from lard.

4. This compound is ricinoleic acid, obtained from castor oil.

Question 8. What of the followings are NOT essential fatty acids? (There might be one or more correct answers.)

1. Stearic acid

2. Oleic acid

3. Linoleic acid

4.  $\alpha$ -linolenic acid

Question 9. Choose the correct application fields of castor oil. (There might be one or more correct answers.)

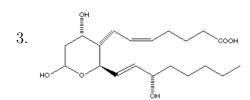
- 1. Detergents
- 2. Cooking oil
- 3. Paints
- 4. Cosmetics

Question 10. Choose the compound having conjugated double bonds. (There might be one or more correct answers.)

- 2.
- 3.

Question 11. What categories do the following compounds belong to?

- 2. COOH
- A. Tromboxanes
- B. Prostaglandins
- C. Leukotrienes



Question 12. What of the following compounds is NOT suitable for food emulsifier? (There might be one or more correct answers.)

- 1. triacylglycerol
- 2. 1-monoacylglycerol
- 3. phosphatidylcholine
- 4. sodium dodecyl sulfate

Question 13. Choose the structure from the left which is correspondent to the word in the right.

- A. phosphatidylcholine
- B. phosphatidic acid
- C. cardiolipin
- D. phosphatidylserine
- E. phosphatidylinositol

Question 14. Choose the correct structure of ceramide.

Question 15. Answer the name of this lipid.

Question 16. What of the followings are NOT synthesized via mevalonic pathway? (There might be one or more correct answers.)

- 1. steroids
- 2. eicosanoids
- 3. squarene
- 4. carotenoids

Question 17. Choose the correct stucture of isoprene.

- 1.
- 2.
- 3.
- 4.

Question 18. What of the followings is used as special cooking oil which is clamed to prevent body-fat-accumulation?

- 1. 1-monoacylglycerol
- 2. 2-monoacylglycero
- 3. 1,3-diacylglycerol
- 4. 1,2-diacylglycerol

Question 19. Prostaglandins (PGs) are categorized by the structure of the five-membered ring (A to I), as well as the precursor fatty acids (type 1 to 3). Choose the structure from the right that is correspondent to the word in the left.

- 1. PG As
- 2. PG Bs
- 3. PG Cs
- 4. PG Ds
- 5. PG Es

Question 20. Choose the reactions which do not happen in animal cells. (There might be one or more correct answers.)

- 1. oleic acid  $\longrightarrow$  linoleic acid
- 2. stearic acid  $\longrightarrow$  oleic acid
- 3. linoleic acid  $\longrightarrow \alpha$ -linolenic acid
- 4. linoleic acid  $\longrightarrow \gamma$ -linolenic acid