1. De novo synthesis of fatty acids requires all of the following EXCEPT

(a) Biotin (b) NADH

(c) Pantothenic acid (d) ATP Ans b

2.Fatty liver may be prevented by all the following EXCEPT

a.Choline b.Vitamin E c. Methionine d.Ethionine Ans D

3.Which one of the following enzymes is inhibited by the nonsteroidal anti-inflammatory drug (NSAID) aspirin?

a. Lipoxygenase b. Prostacyclin synthase

c. Cyclooxygenase d.Thromboxane synthase Ans: c

4. Which of the following lipoproteins would contribute to the measurement of plasma cholesterol in a normal individual following a 12 hour fast?

a. Chylomicrons b. VLDL

c. LDL d. Both VLDL and LDL Ans: d

5. Human desaturase enzyme cannot introduce a double bond beyond

a.Carbon 9 b.Carbon 6 c.Carbon 5 d. Carbon 3 Ans A

6.Adipose tissue lacks

a.hormone sensitive lipase b.Glycerol kinase

c.cAMP dependent protein kinase d.Glycerol-3-phosphate dehydrogenase Ans B

7.Apolipoprotein A-I & A-II are present in

a.LDL Only b.LDL & VLDL

c.HDL Only d.HDL & Chylomicrons Ans D

8.Co-lipase is a

a.Bile salt b.Vitamin c.Protein d.Phospholipid Ans C

9.Glutathione is a constituent of

a.Leukotriene A4 b.Thromboxane A1

c.Leukotriene C4 d.Prostaglandin E2 Ans C

10.All the following statements about Tangier disease are true except

a.It is a disorder of HDL metabolism b.It increases the risk of atherosclerosis

c.plasma cholesterol is increased d.plasma HDL is increased Ans D

11. ATP is a Co-Substrate as well as an allosteric inhibitor of

a.Phosphofructokinase b. Pyruvate kinase

c.Glucokinase d.Phosphoglycerate kinase Ans A

12. A known case of G6PD deficiency will show

a. Low RBC oxygen transportation

b. High RBC oxygen transportation

c. Low glutathione

d. Low glutathione oxidase activity Ans: C

13. Liver biopsy of a person suffering from hepatomegaly revealed accumulation of highly branched glycogen. Which of the following disease might be responsible in this case?

a.Cori’s disease b.Anderson’s disease

c.Von gierke’s disease d.Her’s disease Ans A

14.Deficiency of the which of the following will lead to Fructose malabsorption?

a.SGLUT 1 b.GLUT 5 c.GLUT 3 d.GLUT 4 Ans B

15.A 40 year old male was posted for cholecystectomy. On pre-operative investigations, his urine Benedict test showed 4+ whereas, serum glucose was within normal limits. Genetic studies revealed presence of mutations in xylitol dehydrogenase. Which of the following might be responsible for abnormal Benedict test result in this patient?

a.Glucose b.Galactose c.Xylulose d.Xylitol Ans C

16.Ethanol decreases gluconeogenesis by:

a.Inhibiting glucose -6-Phosphatase

b.Inhibiting Phosphoenol pyruvate carboxykinase

c.Converting NAD+ into NADH & decreasing the availability of pyruvate

d. Converting NAD+ into NADH & decreasing the availability of Lactate Ans C

17.Iodoacetate inhibits:

a.Aldolase b. Glyceraldehyde -3-phosphate dehydrogenase Ans B

c.Phosphoglycerate mutase d.Enolase

18.GTP is required in the reaction catalysed by

a.Pyruvate carboxylase b.PEP carboxykinase

c.Fructose 1,6 bisphosphatase d.Glucose 6 phsosphatase Ans B

19.All are true with Insulin receptor EXCEPT

a.It is present on cell membranes

b. Its binding with Insulin activates adenylyl kinase

c.It has 4 subunits

d. Its activation leads to Glut-4 translocation into cell membranes Ans B

20.A lactating mother’s urine was found to be positive for Benedict’s test. Her Fasting serum glucose was 80mg/dl & PPBS was 140mg/dl. She may be a case of

a.Untreated diabetes mellitus b.Renal glycosuria

c.DM treated with inadequate dose of Insulin c.Lactosuria Ans B