**Question 1**

Nucleotide breakdown releases purines and pyrimidines. Which of the following is NOT their subsequent fate?

Select one:

a. Pyrimidines are catabolised to carbon dioxide and ammonia

b. Excreted unchanged in the urine

c. Re-used to form nucleosides, nucleotides and nucleic acids

d. Directly enter the urea cycle

Answer D. Ganong 23rd Edition pg 10

**Question 2**

Regarding lipoproteins, which statement is INCORRECT?

Select one:

a. LDL are taken up by macrophages

b. Elevated IDL levels predispose to atherosclerosis

c. VLDL transport cholesterol formed in the liver to extrahepatic tissues

d. Chylomicrons can cause post-prandial plasma to appear milky

Answer C. Ganong 23rd Edition pg 27

**Question 3**

Regarding Vitamin B12:

Select one:

a. It is synthesized by micro organisms

b. It is a fat soluble vitamin

c. Intrinsic factor has a higher affinity for cyanocobalamin than does haptocorrin

d. It is mainly carried in plasma by attachment to albumin

Answer A.

**Question 4**

The arterial blood level at which glycosuria appears is:

Select one:

a. 180 mg/dL

b. 18 mg/dL

c. 800 mg/dL

d. 1.8 g/dL

Answer A. Ganong 23rd Edition pg 23 figure 1-25 (180mg/dL = 10mmol/L)

**Question 5**

The majority of ingested iron is absorbed from the:

Select one:

a. Proximal ileum

b. Duodenum

c. Proximal jejunum

d. Distal jejunum

Answer B. Ganong 23rd Edition pg 459

**Question 6**

What is the basal metabolic rate of an average sized man per day?

Select one:

a. 1000 Kcal

b. 2000 Kcal

c. 4000 Kcal

d. 3000 Kcal

Answer B. Ganong 23rd Edition pg 462 (Note Kcal = Cal = 1000 cal)

**Question 7**

Which is true regarding brown fat?

Select one:

a. Brown fat cells contain multiple droplets of fat

b. It is fat with a large percentage of melatonin as a constituent

c. Heat production is assisted by uncoupling of the H/ATP generator system in the sarcoplasmic reticulum

d. It is more abundant in adults than in infants

Answer A. Ganong 23rd Edition pg 24

**Question 8**

Which is true regarding the respiratory quotient?

Select one:

a. It is the ratio of CO2 to O2 in the body at any one time

b. It is possible for it to be negative

c. In acidosis it goes down

d. Can go as high as 2.00 because lactic acid produces more oxygen

Answer B. Ganong 23rd Edition pg 461

**Question 9**

Which of the following is an essential fatty acid?

Select one:

a. Palmitic acid

b. Stearic acid

c. Linolenic acid

d. Myristic acid

Answer C. Ganong 23rd Edition pg 27

**Question 10**

With regard to carbohydrate metabolism:

Select one:

a. Glucose can be converted to fats through acetyl CoA which is irreversible

b. Glycogen, the storage form of glucose, is only in the liver and skeletal muscle

c. The normal fasting glucose is from 3.9 to 11 mmol/L

d. Glucose is phosphorylated in cells to glucose-6-phosphate by phosphoenolpyrunate carboxykinase

Answer A. Ganong 23rd Edition pg 20