



**Question 1** Following is most preferable item in Gout?

- A Fish
- B Meat
- C Egg
- D Green leafy vegetables

**Question 2** Glucose 6 Phosphate Dehydrogenase deficiency causes all EXCEPT,

- A Deficiency of NADPH
- B Hemolysis
- C Cell membrane injury
- D Deficiency of Ribose 5 Phosphate

**Question 3** The activity of lipoprotein lipase is increased by

- A Chondroitin sulphate
- B Hyaluronic Acid
- C Keratan sulphate
- D Heparin

**Question 4** The activity of following enzyme is increased by insulin EXCEPT

- A Hexokinase
- B Pyruvate kinase
- C Pyruvate dehydrogenase
- D Glucokinase

**Question 5** Following is generally given as enema

- A Hypertonic Glycerol
- B Hypotonic Glycerol
- C Sterile water
- D Hypotonic Saline

**Question 6** Glucuronic acid is used in the metabolism of all EXCEPT

- A Bilirubin
- B Drugs
- C Bile Salts
- D Proteoglycans

**Question 7** Sodium glucose symport in intestine obtains energy directly from

- A hydrogen ion concentration gradient
- B ATP
- C sodium ion concentration gradient
- D GTP



**Question 8** Omega-3 fatty acids have atleast one double bond between

- A third and forth carbon from -CH<sub>3</sub> side
- B second and third carbon from -COOH side
- C second and third carbon from -CH<sub>3</sub> side
- D third and forth carbon from -COOH side

**Question 9** Following is required for reverse cholesterol transport by HDL,

- A Lipoprotein Lipase
- B LCAT (Lecithin Cholesterol Acyl Transferase)
- C ACAT (Acyl-CoA Cholesterol Acyl Transferase)
- D Hormone Sensitive Lipase

**Question 10** Which of the following is NOT a function of cholesterol ?

- A Cell Membrane formation
- B Energy production
- C Precursor of hormones
- D Emulsification

**Question 11** Orlistat (a lipase inhibitor) , used to reduce obesity, can cause all except

- A abdominal pain
- B Steatorrhea (passing large amount of fat in the stool)
- C Constipation
- D Flatulence

**Question 12** Which fatty acid has highest melting point

- A Long chain PUFA
- B Short chain Saturated FA
- C Short chain PUFA
- D Long chain Saturated FA

**Question 13** All of following is true about Thromboxane A<sub>2</sub> , except

- A It derived from the membrane phospholipid
- B It produce by lipoxygenase pathway
- C NSAID inhibit its production
- D It induces platelet aggregation

**Question 14** The percentage of A + G equals

- A 100
- B 80
- C 50
- D 26



**Question 15** The 3' end of each Okazaki fragment is joined to the 5' end of the next fragment by

- A DNA Polymerase III and DNA ligase
- B DNA ligase
- C DNA Polymerase I and DNA ligase
- D DNA Polymerase I

**Question 16** Which of the following is not true for histones?

- A H1,H2,H3 and H4 form the nucleosome core
- B They are associated with the nucleosome
- C They are rich in basic amino acids
- D H1 functions as a monomer

**Question 17** DNA polymerase I can do all of following except,

- A 3'to 5' exonuclease activity
- B 5' to 3' exonuclease activity
- C 5' to 3' polymerase activity
- D 3' to 5' polymerase activity

**Question 18** During translation, Wobbling phenomena prevent effect of

- A point mutation
- B codon deletion
- C frame shift mutation
- D base deletion

**Question 19** Following exist between two adjacent intra chain nitrogen bases in double stranded DNA

- A Glycosidic bond
- B Phosphodiester bond
- C Hydrogen bond
- D Hydrophobic interaction

**Question 20** Telomerase help to initiate

- A Replication of telomer
- B Shorting of telomer
- C Replication of telomer and Extension of telomer
- D Extension of telomer

**Question 21** Which fatty acid has highest melting point?

- A unwind DNA, weaken hydrogen bond and decrease supercoiling
- B weaken hydrogen bond
- C decrease supercoiling
- D unwind DNA



**Question 22** If any enzymatic reaction require 'high free energy of activation' it means

- A It is fast reaction
- B It is slow reaction
- C None
- D It generates more energy

**Question 23** In competitive inhibition inhibitor

- A is analogous to substrate
- B binds with site other then active site
- C causes change in active site
- D is analogous to enzyme

**Question 24** In competitive inhibition,

- A  $K_m$  value increases and  $V_{max}$  remain unchanged.
- B  $K_m$  remain unchanged and  $V_{max}$  value decrease.
- C  $K_m$  remain unchanged and  $V_{max}$  value increases.
- D  $K_m$  value decreases and  $V_{max}$  remain unchanged.

**Question 25** In first order kinetic, with increasing substrate concentration, velocity of reaction

- A remain unchanged
- B decreases.
- C increases
- D None of these

**Question 26** Ethanol is use in methanol poisoning as it causes

- A non-competitive inhibiton of ADH enzyme
- B suicide inhibiton of ADH enzyme
- C allosteric inhibition of ADH enzyme
- D compatitive inhibition of ADH enzyme

**Question 27** Haemoglobin is good buffer in blood because

- A haemoglobin concentration is high in blood.
- B pK of it's histidine residue is nearer to physiological pH. and haemoglobin concentration is high in blood
- C pK of it's histidine residue is nearer to physiological pH.
- D it's pI is nearer to physiological pH.

**Question 28** All of the following help prevent formation of bad taste and bad odor (rancidity) of the fried foods except

- A Nitrogen Packing
- B Vaccum Packing
- C Vitamin E
- D PUFA



**Question 29** A patient came in emergency with history of Snake bite. Complete Blood Count report showed Hb : 4.0 gm %. Snake venom have phospholipases. The cause for anemia is

- A Inhibition of phospholipid synthesis
- B Damage to RBC membrane.
- C Damage to RBC membrane, Detergent activity of Phospholipases and Inhibition of phospholipid synthesis
- D Detergent activity of Phospholipases

**Question 30** Which of the following is essential fatty acid ?

- A Linoleic acid and Linolenic acid
- B Arachidonic acid
- C Linoleic acid
- D Linolenic acid



**Answer sheet:**

Firstname and lastname: .....
----------------------------------

*Answers must be given exclusively on this sheet: answers given on the other sheets will be ignored.*

- QUESTION 1:  A  B  C  D
- QUESTION 2:  A  B  C  D
- QUESTION 3:  A  B  C  D
- QUESTION 4:  A  B  C  D
- QUESTION 5:  A  B  C  D
- QUESTION 6:  A  B  C  D
- QUESTION 7:  A  B  C  D
- QUESTION 8:  A  B  C  D
- QUESTION 9:  A  B  C  D
- QUESTION 10:  A  B  C  D
- QUESTION 11:  A  B  C  D
- QUESTION 12:  A  B  C  D
- QUESTION 13:  A  B  C  D
- QUESTION 14:  A  B  C  D
- QUESTION 15:  A  B  C  D
- QUESTION 16:  A  B  C  D
- QUESTION 17:  A  B  C  D
- QUESTION 18:  A  B  C  D
- QUESTION 19:  A  B  C  D
- QUESTION 20:  A  B  C  D
- QUESTION 21:  A  B  C  D
- QUESTION 22:  A  B  C  D
- QUESTION 23:  A  B  C  D
- QUESTION 24:  A  B  C  D
- QUESTION 25:  A  B  C  D
- QUESTION 26:  A  B  C  D
- QUESTION 27:  A  B  C  D
- QUESTION 28:  A  B  C  D
- QUESTION 29:  A  B  C  D
- QUESTION 30:  A  B  C  D