

FBQ1: _____ is the main component of cell walls of plants.

Answer: *cellulose*

FBQ2: Number of moles of solute / Mass of solvent in kg

Answer: *Molality*

FBQ3: _____ is defined as the ratio of the weight of solute to the total weight of solute plus solvent multiplied by 100.

Answer: *Weight percentage*

FBQ4: A solution with a relatively small concentration of solute is said to be _____.

Answer: *Dilute*

FBQ5: Complete hydrolysis of starch is proved by positive _____ test.

Answer: *Benedict's*

FBQ6: Calculate the mole fraction of C_2H_5OH in a solution that contains 46 grams of ethanol, C_2H_5OH , and 64 grams of methanol, CH_3OH .

Answer: $\frac{1}{3}$

FBQ7: The S. I. unit of concentration is _____.

Answer: g/dm^3

FBQ8: The gram-equivalent weight of an acid is that weight of the acid in grams which produces 1.008g of _____.

Answer: *Hydrogen ion*

FBQ9: The S I unit for amount is _____.

Answer: *Mole*

FBQ10: _____ possess between 3 to 7 carbon atoms in their structure.

Answer: *Monosaccharides*

FBQ11: The levels of blood glucose are sensitively regulated by _____.

Answer: *Hormones*

FBQ12: _____ reacts with Iodine monochloride (ICI) to release iodine from the double bonds of unsaturated fatty acids.

Answer: *Potassium iodide*

FBQ13: In thin layer chromatography, the thin layer of adsorbent particles attached to a solid plate is the _____ phase.

Answer: *Stationary*

FBQ14: In thin layer chromatography, neutral lipids are separated using _____ solvents.

Answer: *Non-polar*

FBQ15: The concentration of concentrated laboratory H₂SO₄ is about ____ M. Â
Answer: *18*

FBQ16: Iodine number test is carried out to calculate the relative ____ of fats.Â
Answer: *Unsaturation*

FBQ17: Carbohydrates have characteristics ____ that can distinguish them from other molecules.Â
Answer: *tests*

FBQ18: ____ are very, important biological macromolecules that predominantly occur in almost all living things.Â
Answer: *Carbohydrates*

FBQ19: The basic units of carbohydrates are _____. Â
Answer: *Monosaccharides* Â

FBQ20: How many carbon atoms are present in a molecule of fructose _____
Answer: *6*

FBQ21: In separating lipids using TLC, the lipids are separated into groups according to their _____.
Answer: *Polarity*

FBQ22: In Folin-Wu Method, the concentration of phosphomolybdous acid is proportional to the concentration of _____. Â
Answer: *glucose*

FBQ23: Diabetes is the disease associated with changes in the blood _____level from the normal level. Â
Answer: *glucose*

FBQ24: The most used method for separation of lipids is _____. Â
Answer: *thin layer chromatography*

FBQ25: Nitrogen-containing compounds of high molecular weight found in association with proteins in the cell are known as _____. Â
Answer: *Nucleic acids*

FBQ26: _____ act as a store of genetic information. Â
Answer: *DNA*

FBQ27: A general reaction for pentose that depends on the formation of furfural when the pentose is heated with concentrated hydrochloric acid is known as _____. Â
Answer: *Orcinol reaction* Â

FBQ28: For rough indication of pH, _____ can be used. Â
Answer: *indicator papers*

FBQ29: Inorganic phosphate reacts with _____ in an acid solution to form phosphomolybdic acid.

Answer: *ammonia molybdate*

FBQ30: The principle of a _____ is that known amounts of pure substance being assayed are treated, and then the readings taken.

Answer: *calibration-curve*

FBQ31: The volume of the solute present in 100 parts by volume of solution is called the _____.

Answer: *Volume percentage*

FBQ32: The symbol "N" stands for the concentration of solutions in _____.

Answer: *Normality*

FBQ33: _____ test can be undertaken to differentiate between glucose and fructose.

Answer: *Seliwanoff*

FBQ34: A solution with a large concentration of solute is said to be _____.

Answer: *concentrated*

FBQ35: A solution made by dissolving 9.81 g of a non volatile nonelectrolyte in 90.0 g of water boiled at 100.37 °C at 760 mm Hg. What is the approximate molecular weight of the substance? (For water, $K_b = 0.51\text{ }^{\circ}\text{C/m}$)

Answer: *150 g/mol*

Multiple Choice Questions (MCQs):

MCQ1: Which of the following is the correct definition of the Avogadro's constant (L)?

Answer: No of particles divided by mass of species

MCQ2: Which of these tests will give the quantity of carbohydrate in a sample?

Answer: Molisch's reaction

MCQ3: The following are components of Fehling's reagent except _____.

Answer: Potassium sodium tartate

MCQ4: Failure of pancreas to produce sufficient insulin is a condition found in _____.

Answer: hepatitis

MCQ5: The reaction of Barfoed's reagent with reducing monosaccharides gives a _____ colour.

Answer: Violet

MCQ6: Which test is used to distinguish simple sugar from complex sugars?

Answer: Benedict's test

MCQ7: One of these statements is NOT entirely true of carbohydrates:

Answer: They are biological macromolecules that predominantly occur in almost all living things.

MCQ8: The general test of carbohydrates is _____.

Answer: Benedict's Test

MCQ9: The following tests are based on derivatives of furfural or furfural formation except _____.

Answer: Molisch

MCQ10: The normal blood glucose range in an average man is _____.

Answer: 4-8 mmol/L

MCQ11: One of these statements best defines a Standard Solution.

Answer: One that contains 100g of the substance in 100 ml of solvent.

MCQ12: Which of these tests takes advantage of the acid catalysed dehydration of simple sugar to produce either furfural or 5-OH methyl furfural which combines with α -naphthol to produce a purple complex?

Answer: Iodine Test

MCQ13: The number of moles of NaCl in 3 litres of 3 M solution is _____.

Answer: 1

MCQ14: Which of the following entities changes with temperature?

Answer: Molarity

MCQ15: Nucleic acids can be analyzed experimentally by their _____.

Answer: Molecular weight

MCQ16: RNA differs from DNA in all of the following ways except _____.

Answer: The presence of Thymine

MCQ17: RNA is sometimes the genetic material in _____.

Answer: Yeast

MCQ18: Further purification during the isolation of RNA from yeast can be made by treating the preparation with _____.

Answer: Amylase

MCQ19: The denatured protein during RNA isolation from yeast is removed by _____.

Answer: Distillation

MCQ20: The difference between Benedict's and Barfoed's test is _____.

Answer: Benedict's test is carried out in weak alkaline medium while Barfoed's is in acidic medium

MCQ21: Complete hydrolysis of starch is proved by positive _____ test.

Answer: Iodine

MCQ22: Carbohydrates are found in all but one of these substances:

Answer: They are found in insulin

MCQ23: Carbohydrates form part of the following except :Â

Answer: Nucleic acid

MCQ24: _____ is defined as the number of grams of iodine absorbed by 100 grams of lipid.

Answer: Iodine number

MCQ25: Carbohydrates are involved in all these EXCEPT

Answer: Digestive Enzymes

MCQ26: A risk factor for heart disease includes _____.Â

Answer: Active lifestyle

MCQ27: The hydrolysis of fat by alkali is called _____.

Answer: Saponification

MCQ28: What colour does iodine solution give with glycogen?

Answer: blue

MCQ29: Which of the following gives reddish yellow precipitate when it is boiled with Benedict's solution?

Answer: Sucrose

MCQ30: Fehling's solution is prepared by dissolving 6.93g of _____ in 100 ml of distilled water.Â

Answer: Sodium sulphate

MCQ31: One of these is NOT a reducing sugar:

Answer: Sucrose

MCQ32: The S.I. units for length, mass, time and amount are _____.Â

Answer: centimeter, gram, second and mole

MCQ33: The condition in which the blood sugar level is high is referred to as _____.Â

Answer: Hypochlorea

MCQ34: In the determination of iodine number of a lipid the following reagents will be required except

Answer: chloroform

MCQ35: The concentration of phosphomolybdous acid is proportional to concentration of glucose is the principle applied in one of these methods of estimation

Answer: Folin-Wu method