


Daily Tutorial Sheet 2

JEE Main (Archive)

**16.(A)** Vitamin B and C are water soluble while vitamin A, D, E and K are fat soluble or water insoluble.

**17.(C)** Starch is polymer of glucose hence on hydrolysis produce only glucose.

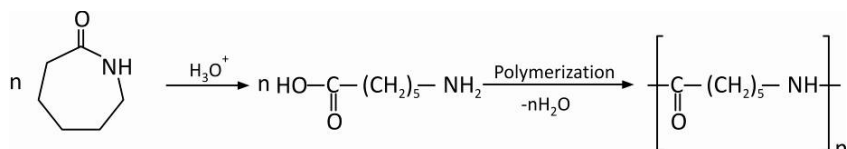
**18.(A)** Polymer of chloroprene 

**19.(A)**  $(C_6H_{10}O_5)_n + nH_2O \longrightarrow nHOCH_2 - (CHOH)_4CHO$   
Starch Glucose

**20.(A)** Teflon is addition polymer while all other are condensation polymers.

**21.(C)** Ninhydrin is used to detect proteins. Ninhydrin reacts with free amine group of proteins to produce a deep blue or purple colour known as Ruhemann's purple.

**22.(C)** Low density polythene is chemically inert and tough but flexible and a poor conductor of electricity. Hence, it is used in the insulation of electricity carrying wires and manufacture of squeeze bottles, toys and flexible pipes.

**23.(B)**   
(caprolactum)

**24.(D)**

**25.(B)** Valine is essential amino acid while others are non-essential amino acids.

**26.(B)**  $\alpha$ -D-glucose and  $\beta$ -D-glucose are anomers.

**27.(A)** Cellulose is the natural fibre which are biodegradable polymer, rest are synthetic polymer which are not biodegradable.

**28.(B)** In normal physiological condition it exists as monoprotonated and aliphatic nitrogen is most basic hence it will be protonated.

**29.(A)** Seliwanoff's test: Seliwanoff's reagent is (0.5%) resorcinol in 3N HCl. It gives red solution with fructose and sucrose but no change in colour with glucose.

**30.(D)** Maltose is a disaccharide made up of two D-glucose units. On treatment with dil. HCl it undergoes hydrolysis to give two D-glucose units. (Monosaccharide)