

Daily Tutorial Sheet 3 JEE Main (Archive)

31.(c)
$$H_2N - C - NH_2 + H - C - H$$
 $NH - C - NH - CH_2$
(Urea) (Formaldehyde)

(Urea-formaldehyde Resin)

32.(D) Ceric ammonium nitrate test is for alcohols and carbylamines test is for amines. Both these functional groups are present in peptide formed by serine and lysine.

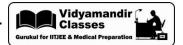
- 33.(D) Sucrose is formed due to bonding between.
 - α Glucose from C_1 position and $\,\beta$ fructose from C_2 position.
- **34.(B)** Glucose

'4' ⇒ no. of stereocentre

- '5' ⇒ no. of stereocentre
- 35.(A) Refer NCERT
- **36.(B)** Amylopectin is branched polymer of α D glucose having C_1 C_4 and C_2 C_6 linkage.
- **37.(D)** Nylon is condensation polymer while all other are addition polymers.

38.(A)
$$CH_3$$
 CH_3 CH_3 CH_3 CH_3 CH_3 CH_3 CH_3 CH_4 CH_4 CH_5 CH_5

- **39.(A)** Glycogen is NOT similar in structure to amylose which is a straight chain polymer. It shows similarity with amylopectin in its structure with higher number of branches. Glycogen is generally found in animal cells and also in some yeast and fungi. It only have α linkages between the monomeric units.
- **40.(A)** Bakelite is a thermosetting polymer.



Configuration of galactose is different around C-4.

42.(C) RNA is single stranded structure.

Higher the $\, {\rm pK_a}, \,$ lower is the acidic strength Asp < Gly < Lys < Arg

44.(B) Valine =
$$H_3C$$
 OH Serine = H_3C OH H_2 OH H_3C OH H_4 OH H_5 OH

45.(C) Ninhydrin test is for amines

Biuret test is for detecting the presence of peptide bonds

Barfoed test is for detecting presence of monosaccharides

Xanthoproteic test is for estimating amount of protein soluble is solution