CHO-452 CARBOHYDRATE & CHIRON APPROACH & CHIRAL DRUGS & MEDICINAL CHEM_2013

Item Text	Option Text 1	Option Text 2	Option Text 3	Option Text 4
Which carbon becomes the anomeric in Glucopyranose form?	C1	C2	C5	C6
Which of the following statements regarding the reducing ability of a sugar is wrong?	The aldehyde group of a saccharide is responsible for its reducing properties.	Ketoses are not reducing sugars because they are not aldehydes.	D-Glucose in predominantly in a cyclic hemiacetal form but it is a reducing sugar through the acyclic form with which the hemiacetal is in equilibrium.	A methyl glucoside is not a reducing sugar.
Which is the correct assignment of configurations of chirality centres, C2-C5, of D-glucose?	2R, 3S, 4R, 5R	2*S*, 3*R*, 4*S*, 5*S*	2*R*, 3*R*, 4*R*, 5*R*	2*S*, 3*S*, 4*R*, 5*R*
Which of the following is **not** a reducing sugar?	D-fructose	D-ribose	cellobiose	sucrose
Which of the following monosaccharides gives an optically inactive product on oxidation with conc. nitric acid?	D-glucose	D-mannose	D-galactose	D-fructose
Which is the prefered conformation of the D-glucopyranose ?	1C4	4C1	2C4	4C2
Which of the following is an oligosaccharide ?	monosaccharide aldose	monosaccharide ketose	disaccharide	polysaccharide
----- number of carbon atom(s) may be added at a time in Killiani Fischer synthesis of carbohtdrates.	1	2	3	4
First step of Ruff's degradation is the addition of------reagent.	HCN	Sodium borohydride	bromine water	Fenton's reagent

CHO-452 CARBOHYDRATE & CHIRON APPROACH & CHIRAL DRUGS & MEDICINAL CHEM_2013

Aldoses on oxidation with conc. nitric acid forms ---- acid.	Tetracarboxyilic	Tricarboxyilic	Dicarboxyilic	Monocarboxyilic
D-Mannose is a ---- of D-Glucose.	Anomer	Epimer	Enantiomer	Dimer
Which is the preferred configuration for the synthesis of S-propanediol from aldohexose with respective stereochemistry at C2,C3,C4 and C5	R,S,R,R	S,S,R,R	R,R,R,R	R,S,S,R
Following seqeunce of reagents is used in the preparation of protected glyceraldehyde as an intermediate during the synthesis of S-propanediol from D-mannose	i) lead acetate, ii) acetone/acid, iii) sodium borohydride	i) lead acetate, ii) sodium borohydride, iii) acetone/acid	i) acetone/acid, ii) sodium borohydride, iii) lead acetate	i) sodium borohydride, ii) acetone/acid, iii) lead acetate
Which of the following seqeunce is used for the convertion of protected D-glyceraldehyde intermediate to S-propanediol from D-mannose	i) Raney Ni, ii) TsCl/Py, iii) NaI/acetone, iv) Raney Ni	i) Raney Ni, ii) NaI/acetone, iii) TsCl/Py, iv) Raney Ni	i) TsCl/Py, ii) Raney Ni, iii) NaI/acetone, iv) Raney Ni	i) NaI/acetone, ii) Raney Ni, ii) TsCl/Py, iv) Raney Ni
The difference in the pharmacocological activity between two enantiomers of the drug is termed as ….	Eotomer	distomer	Eudesmic ratio	lipinski rule
3-hydroxy-2-R-methyl propanoic acid is used for the synthesis of …	Metaprolol	Griseofulvin	Captopril	Ibuprofen
Captopril can be synthesized from ---	3-Chloro-2-R-methyl propanoyl chloride	3-Chloro-2-R-methyl propyl chloride	3-hydroxy-2-R-ethyl propanoyl chloride	3-Chloro-2-R-methyl pentanoyl chloride
Ibuprofen can be prepared by ------ process.	Shimazaki	Boot's	Trost's	Shell
Chiral drug should necessirily have minimum --- number of asymmetric centers .	1	2	3	4

CHO-452 CARBOHYDRATE & CHIRON APPROACH & CHIRAL DRUGS & MEDICINAL CHEM_2013

--- is the example of distomer with undesirable side effects.	S-Penicillamine	R-Penicillamine	Paracetomol	Ibuprofen