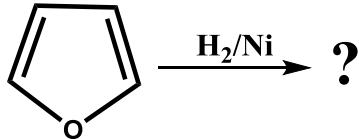


1.	Which of the following five membered a ring is most resonance stabilized? A. Furan B. Thiophene C. Pyrrole D. Pyridine	B
2.	Which is the most reactive five membered heterocyclic compound? A. Furan B. Thiophene C. Pyrrole D. Pyridine	C
3.	 A. 1, 2-dioxane B. Tetrahydrofuran C. 1, 4-dioxane D. Trihydrofuran	D
4.	What is the product when thiophene reacts with Br <sub>2</sub> in benzene? A. 2-bromothiophene B. 3-bromothiophene C. 2,5-dibromothiophene D. 3,4-dibromothiophene	C
5.	Which of the following solvents is a heterocyclic compound? A. DMSO B. DMF C. THF D. None of the above	C
6.	Which of the followings statements is correct? A. Pyrrole has less aromatic character than furan B. Pyridine is isoelectronic with benzene C. Pyridine is tertiary amine D. Pyrrole is strong base	C

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7.	What is the correct order of reactivity (most reactive first) of pyrrole, furan and thiophene towards electrophiles? A. Furan > Pyrrole > Thiophene B. Pyrrole > Furan > Thiophene C. Furan > Thiophene > Pyrrole D. Thiophene > Pyrrole > Furan	B
8.	Electrophilic substitution in furan usually occurs at: A. Both the C2 and C3 atom B. The O atom C. The C2 atom D. The C3 atom	C
9.	Followings are types of optical isomers except____ A. Enantiomers B. Diastereomers C. Conformers D. Meso compounds	C
10.	Which statement about thiophene is incorrect? A. The S atom contributes two electrons to the n-system B. Thiophene is polar C. Thiophene is less reactive than pyrrole D. Thiophene is more reactive than furan	D
11.	Pyrrole undergoes sulfonation in presence of _____to produce pyrrole – 2– sulfonic acid. A. Conc. Sulphuric acid B. SO <sub>3</sub> and pyridine C. Dilute sulphuric acid/pyridine D. SO <sub>3</sub> and ethanol	B
12.	Atorvastatin, drug useful in CVS disease, contain heterocyclic ring_____. A. Pyrazole B. Pyrrole C. Imidazole D. Purine	B
13.	Bepridil, calcium channel blocker, contain heterocyclic ring_____	A

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	A. Pyrrole B. Purine C. Indole D. Pyridine	
14.	Ondansetron, anti-emetic drug, contain heterocyclic ring_____ A. Thiophene B. Pyrrole C. Furan D. Pyrimidine	B
15.	Which drug(s) possess pyrrole heterocyclic compound from the followings? A. Captopril B. Lincomycin C. Triprolidine D. All of the above	D
16.	Friedel craft acetylation of furan by using acetic anhydride is carried out in the presence of catalyst_____ A. AlCl <sub>3</sub> B. FeCl <sub>3</sub> C. BF <sub>3</sub> D. LiAlH <sub>4</sub>	D
17.	Bromination of furan by using Br <sub>2</sub> will produce_____ A. 2 – bromo furan B. 3 – bromo furan C. 2,5 – dibromo furan D. None of the above	D
18.	Prazocin, sympatholytic drug contain_____heterocyclic ring A. Furan B. Pyrrole C. Oxazole D. Indole	A
19.	Which heterocyclic ring is present in Rofecoxib, NSAID? A. Pyrrole B. Furan	B

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	C. Purine D. Indole	
20.	What is not true about thiophene from the following sentences? A. Thiophene shows aromaticity. B. Thiophene contains oxygen heteroatom. C. Thiophene has diene like structure. D. Thiophene has a flat pentagonal ring.	B
21.	Which is the true statement from followings? A. Thiophene is more stable than pyrrole B. Thiophene is more stable than furan C. Both (a) & (b) D. None of the above	C
22.	Thiophene shows electrophilic substitution reactions mainly at position____. A. C2 B. C3 C. C4 D. C5	A
23.	Which condition is appropriate for the nitration of thiophene? A. Acetyl nitrate B. Nitric acid +acetic anhydride C. Concentrated nitric acid D. Sodium nitrate	B
24.	Sulfonation of thiophene can be carried out by using____. A. SO <sub>3</sub> +Conc. HCl B. Dilute Sulphuric acid C. Concentrated Sulphuric acid D. SO <sub>3</sub> + HNO <sub>3</sub>	C
25.	Mucic acid upon dry distillation produces ..... A. Mucic decarboxylate B. furic acid C. furoic acid D. furan carboxylic acid	C

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26.	Dehydration of 1,4-Dicarbonyl compounds involve in.....synthesis A. Reimer-Tiemann B. Fiest-Benary C. Paal-Knorr D. Hantzsch	C
27.	Pyrrole on reduction with ...and .....gives 2,5-dihydropyrrole A. Nickel, acetic acid B. Zinc, Hydrochloric acid C. Zinc, acetic acid D. Nickel, Hydrochloric acid	C
28.	Metal hydrides reagents is a A. Cation of hydrogen B. Anion of hydrogen C. Zwitterion of hydrogen D. Radicle of hydrogen	B
29.	Metal hydride reagents reacts rapidly with .....but slowly with ..... A. Amides, aldehydes & ketones B. Esters aldehydes & ketones C. Aldehydes & ketones, amides D. Aldehydes & ketones, esters	D
30.	$\text{LiAlH}_4$ is a strong hydride donor and rapidly reacts excluding A. Esters B. Amides C. Acids, D. Ester	D
31.	Amalgam is an alloy of ..... A. Tungsten B. Iron, C. Mercury D. platinum	C
32.	.....is known as Clemmensen reagent A. Fe-Hg in HCl B. Zn-Cl in HCl	D

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	C. Zn-Hg in CH <sub>3</sub> COOH D. Zn-Hg in HCl	
33.	Clemmensen reduction involves conversion .....to ..... CH <sub>2</sub> , -C=O- C=O, -CH <sub>2</sub> - C=OH, -CH <sub>2</sub> - C=C, -CH <sub>2</sub> -	B
34.	.....provides a proton to oxygen in Clemmensen reduction A. HCL B. HNO <sub>3</sub> C. H <sub>2</sub> SO <sub>4</sub> D. CH <sub>3</sub> COOH	A
35.	..... reduction is also known as metal ammonia reduction A. Dakin B. Birch C. Metal hydride D. Clemmensen	B
36.	Wolff Kishner reduction convert aldehyde or ketone into alkane using A. Hydrazine B. Base C. Thermal conditions D. All of the above	D

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