**جامعة الملك سعود - كلية العلوم – قسم الكيمياء**

**الاختبار الفصلي الثاني في مقرر 145 كيم (1432هــ1433هــ )**

**الزمن:90 دقيقة**

**أسم الطالب: رقم الطالب:**

**ملاحظة هامة**: **ضع دائرة حول الإجابة الصحيحة. تصحيح الامتحان سيكون بناء علي الإجابة المكتوبة في الجدول السفلي (حرف الإجابة الصحيحة ) ولن ينظر إلى بقية الأوراق والتي تعتبر مسودة.**

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| **الإجابة** | **رقم السؤال** | **الإجابة** | **رقم السؤال** |
|  | **14** |  | **1** |
|  | **15** |  | **2** |
|  | **16** |  | **3** |
|  | **17** |  | **4** |
|  | **18** |  | **5** |
|  | **19** |  | **6** |
|  | **20** |  | **7** |
|  | **21** |  | **8** |
|  | **22** |  | **9** |
|  | **23** |  | **10** |
|  | **24** |  | **11** |
|  | **25** |  | **12** |
|  |  |  | **13** |

1- The structure of m-nitroanisole is:



2- The most acidic compound?

1. Phenol b) P-Nitrophenol c) p-Hydroxyphenol d) 2,4,6-Trinitrophenol

3- Reaction of propene with HCl is classified as:

1. Nucleophilic addition b) Electrophilic addition
2. Electrophilic substitution d)Elimination

4- How many hydroxyl groups does propylene glycol have?

1. One b) Two c)Three d) Four

5- The molecular formula of p-methyltoluene

1. C8H10 b) C8H12 c) C8H14 d) C6H14

6- Hydrolysis of diazonium salt  gives:



7- Which of the following compounds has an aromatic character?



8- Which of the following groups activate the benzene ring towards nitration



9- One of the expected products of the following reaction is:



10 - Which of the following compounds is more soluble in water

1. Diethyl ether b) Butanol c) Ethyl bromide d) Benzene

11- The common name of the following structure  ?

1. Benzene chloride b) Benzyl chloride

c) Benzene methyl chloride d) 1-Chloromethylbenzene

12- Reaction of ethanol with SOCl2 yields:

1. Diethyl ether b) Ethyl chloride c) Dichloroethane d) Ethylene

13- The following reaction gives: 

1. OHCH2CH2OH b) CH3OCH3 c) CH3CH2OH d) CH3CHO

14- The following reaction gives: 



15- Sulfonation of benzene is:

1. Nucleophilic substitution reaction b) Electrophilic addition reaction
2. Electrophilic substitution reaction d) Nucleophilic addition reaction

16- The IUPAC name of the following compound: 

a) 1-Bromo-4-hydroxy-2-methylcyclopentane b) 3-Bromo-4-methylcyclopentanol

c) 4-Bromo-3-methylcyclopentan-1-ol d) 2-Bromo-3-methylcyclopentanol

17- The secondary alkyl halide is:



18- Addition of NaOH to phenol followed by addition of ethyl bromide gives:

a) Ethanol + bromobenzene b) Ethylphenoxide

c) Ethyl phenyl ether d) 2-Ethylphenol + 4-Ethylphenol

19- Which of the following compounds could be reduced by NaBH4 to give secondary alcohol



20- Which of the following compounds can not form hydrogen bond with water

a) t.Butanol b) Methanol c) Dimethylether d)Methyl bromide

21- The common name of the following structure: 

a) Allyl bromide b) Vinyl bromide c) Phenyl bromide d) Bromoethane

22- The number of sigma bond in methylbenzene

a) 10 b) 9 c) 7 d) 4

23- The product of the following reaction is: 

a) 1-Hexene b) Propane c) Dipropyl ether d) 2-Hexene

24- Which of the following compounds could be oxidized by KMnO4 to give

a) Toluene b) t.Butylbenzene c) Isopropylbenzene d) Ethylbenzene

25- The following reaction gives: 

a) Methanol b) Methanol and methyl iodide

c) Iodoethane d) 2 Mol methyl iodide