

رقم الطالبة:

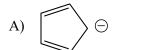
جامعة الملك سعود - كلية العلوم - قسم الكيمياء الفصل الصيفي 1438 هـ ( 2017م) الاختبار الفصلى الثاني في مقرر 145 كيم (23-11-1438 هـ) الزمن: 90 دقيقة أسم الطالبة:

نموذج الأجابة: ملاحظة هامة: تصحيح الامتحان سيكون بناء على الإجابة المكتوبة في الجدول أسفل (حرف الإجابة الصحيحة) ولن ينظر الى بقية الأوراق والتي تعتبر مسودة.

الإجابة	رقم السؤال	الإجابة	رقم السؤال
D	16	A	1
С	17	D	2
В	18	В	3
D	19	A	4
A	20	C	5
С	21	D	6
D	22	В	7
В	23	C	8
A	24	A	9
С	25	D	10
В	26	В	11
D	27	C	12
С	28	D	13
В	29	В	14
A	30	A	15

## Choose The Correct Answer For Each of The Following Questions

#### 1. Which of the following compounds is aromatic?



B) €

D)

#### 2. The common name of methylbenzene is ......

- A) Anisole
- B) Xylene
- C) Cresol
- D) Toluene

#### 3. The name of the following compound is ......

A) 1,2-Dibromophenol

B) 2,3-Dibromotoluene

C) 1,2-Dibromotoluene

D) 2,3-Dibromobenzene

#### 4. Bromination of the benzene ring is ......

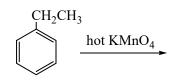
- A) Electrophilic substitution reaction.
- B) Nucleophilic substitution reaction.
- C) Electrophilic addition reaction.
- D) Nucleophilic addition reaction.

# 5. Which of the following groups deactivate the benzene ring?

- A) -OH
- B) -NH<sub>2</sub>
- C) -COOH
- D) -OCH<sub>3</sub>

## 6. The major product of the following reaction is ......

7. The product of the following reaction is ......



- HO-CHCH<sub>2</sub>OH
  A)
- B) COOH
- C) CH<sub>2</sub>CH<sub>3</sub>
- D) CH<sub>2</sub>CH<sub>3</sub>
- 8. The structural formula of the tertiary alkyl bromide is ......
  - A) Br
- B) Bı
- C) Br
- D) Br
- 9. The compound with the highest boiling point is ......
  - A) CH<sub>3</sub>I

- B) CH<sub>3</sub>F
- C) CH<sub>3</sub>Br
- D) CH<sub>3</sub>F

10. The product of following reaction is ......

B) /

- D) Cl
- 11. The product of the following reaction is ......



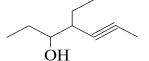
NC B)



- 12. Glycols have ..... hydroxyl group(s).
  - A) four

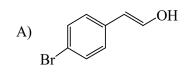
- B) one
- C) two
- D) three

- is .....
- A) 3-Bromo-1-methylcyclohexanol
- C) 4-Bromo-6-methylcyclohexanol
- B) 1-Bromo-3-methylcyclohexanol D) 4-Bromo-2-methylcyclohexanol
- 14. Which of the following alcohols would be oxidized to propanone?
  - A) 2-methyl-2-propanol B) 2-propanol
- C) 1-butanol
- D) Ethanol



- 15. The IUPAC name of
  - A) 4-Ethyl-5-heptyn-3-ol.
  - C) 4-Ethyl-2-hexyn-5-ol.

- B) 4-Ethyl-2-heptyn-5-ol.
- D) 4-Ethyl-5-hexyn-3-ol.
- 16. Which of the following is called *p*-bromobenzyl alcohol?



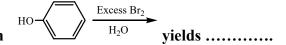
$$N_2 \stackrel{\ominus}{\text{Cl}} \stackrel{\ominus}{\underline{\text{H}}_3^{\oplus} O}$$
, heat

17. The following reaction

gives .....

18. Among the following, which is the least acidic?

# 19. The following reaction

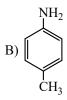


- A) 2,4-Dibromophenol
- C) o-Bromophenol

- B) *m*-Bromophenol
- D) 2,4,6-Tribromophenol

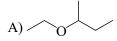
#### 20. The structure of *p*-methyl anisole is ......

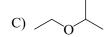






#### 21. The structure of ethyl isopropyl ether is ......





$$D) \downarrow 0$$

#### 22. The product of the following reaction is ......

A) 
$$C_{H_3C}$$
 B)  $C_{H_3C}$   $C_{H_3C}$   $C_{H_3C}$   $C_{H_3C}$ 

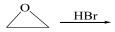
C) 
$$H_3C$$
— $I + H_2O$ 

D) 
$$\begin{array}{c} H_3C \\ CH-I + H_3C-I + H_2O \\ H_3C \end{array}$$

# 23. Formation of diethyl ether from ethanol is based on a ......

- A) oxidation reaction
- B) dehydration reaction
- C) hydrogenation reaction
- D) dehydrogenation reaction

# 24. The product of the following reaction is ......



- A) 2-bromoethanol
- B) Ethanol
- C) Ethane
- D) Ethane

#### 25. The compound with the highest boiling point is .....

- A) Ethane
- B) Acetaldehyde
- C) Ethanol
- D) Dimethyl ether

#### 26. Choose the correct name of the following compound.

- A) 6-Hydroxy-2-octanone.
- B) 6-Hydroxy-2-heptanone.
- C) 2-Hydroxy-6-heptanone.
- D) 2-Hydroxy-6-octanone.

#### 27. The structure of Acetal is ......

A) 
$$OCH_3$$
  $B$   $OCH_3$ 

# C) HO OH

#### 28. What is the product of the following reaction?

- A) 2-Methylhexanal
- B) 2,5-Dimethyl-4-hexanol
- C) 2,5-Dimethyl-3-hexanol.
- D) 2-Methylhexane.

#### 29. The main reaction of an aldehyde carbonyl group is ......

- A) Nucleophilic substitution reaction.
- B) Nucleophilic addition reaction.
- C) Electrophilic addition reaction.
- D) Electrophilic substitution reaction.

#### 30. Reaction of phenylhydrazine with aldehydes or ketones gives ......

- A) Phenylhydrazone
- B) Hemiacetal
- C) Imine
- D) Oxime