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W-19

BP 301 T
Pharmaceutical Organic Chemistry-II
(723301)

P. Pages : 2

Time : Three Hours

Max. Marks : 75

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Graph or diagram should be drawn with the black ink pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. All questions are compulsory.
5. Draw neat & labelled structures.

1. a) Choose the correct answer of the following.

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- 1) Phenanthraquinone on oxidation with $\text{Na}_2\text{Cr}_2\text{O}_7$ yields -----.
a) Diphenic acid
b) Phenanthrene
c) Diphenyl aldehyde
d) None of these
- 2) Molecules formula of saccharin is
a) $\text{C}_6\text{H}_5\text{NO}_3\text{S}$
b) $\text{C}_7\text{H}_5\text{NO}_3\text{S}$
c) $\text{C}_7\text{H}_4\text{NO}_3\text{S}$
d) $\text{C}_7\text{H}_5\text{NO}_2\text{S}$
- 3) Diphenyl methane on oxidation gives
a) Benzene
b) Benzophenone
c) Benzoquinone
d) None of these
- 4) Phenol is
a) Solid
b) Crystalline solid
c) Gas
d) Liquid
- 5) Benzene on reaction with chloroform or CCl_4 in presence of AlCl_3 gives
a) Diphenyl methane
b) Triphenyl methane
c) Both (a) & (b)
d) None of these
- 6) The reaction of aromatic acids with alcohol in presence of H_2SO_4 is called as
a) Esterification
b) Saponification
c) Hydrolysis
d) Neutralisation
- 7) The degree of unsaturation of lipids can be measured as
a) RM value
b) Saponification value
c) Iodine value
d) Polenske value

- 8) Which of the following is more basic than aniline
 - a) Benzyl amine
 - b) p-nitroaniline
 - c) Triphenylamine
 - d) Diphenyl aniline
- 9) During sulphonation of aromatic amine which isomer predominates?
 - a) O-isomer
 - b) M-isomer
 - c) P-isomer
 - d) All of these
- 10) Which of the following compound have highest ring strain
 - a) Cyclopropane
 - b) Cyclobutane
 - c) Cyclopentane
 - d) Cyclomethane

b) Write the answer of the followings.

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- 1) Draw the structure of 3,5-dihydroxyl benzoyl chloride.
- 2) Define acid value and Ester value.
- 3) Draw the structure of 2,5,6 Trinitrotoluene.
- 4) Write the names of ortho-para directing and meta directing groups.
- 5) Draw the structure and write uses of DDT.

2. Answer **any two** out of followings.

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- a) Write the methods of preparation & reactions of Naphthalene.
- b) Explain reaction & mechanism for Friedal Crafts alkylation with limitations & Friedal crafts acylation.
- c) Explain in detail Baeyer's strain theory with limitations.

3. Answer **any seven** out of followings.

35

- a) Give the method of preparation and reactions of Anthracene.
- b) Explain the effect of substituents on reactivity and orientation of mono substituted benzene.
- c) Give the method of preparation and reactions for phenol.
- d) Explain the effect of substituents on acidity of aromatic acids.
- e) Explain the Sachse Mohr's theory of strainless rings.
- f) Give the method of preparation & reactions for Aromatic amines.
- g) Give the principle involved & significance for saponification value.
- h) Explain R.M. value in detail.
- i) Explain the effect of substituents on acidity of phenols.
