Code No. 7287

Pharm-D. I -Year (Instant) Examination, January 2014

Subject : Pharmaceutical Organic Chemistry

Time : 3 Hours **Max. Marks: 70**

Note: Answer All questions from Section – A and any five questions from Section – B.

Section – A (10 x 2 = 20 Marks)

1	What are diasteriomers?	2
2	What are aprotic solvents?	2
3	What is a neucleophile?	2
4	What is Wittig reaction?	2
5	Outline any one method of preparation of benzyl benzoate.	2
6	Explain why carboxylic acids are more acidic than carboxylic phenols.	2
7	Write the structure and uses of dimercaptol.	2
8	Explain Free radical substitution with an example.	2
9	Draw the structures of the following molecules. (i) 1, 2-dibromo-2-methylpropane (ii) 2, 5-dimenthylhexane	2
10	Compare the relative acidities of acetylene, ammonia.	2

Section – B (50 Marks)

11	Discuss the Bayer's strain theory and explain how sache-mohr theory accounts for pit falls of Bayer's theory.	10
12	(a) Explain the SN^1 Mechanism with suitable example and give evidence.	5
	(b) Describe the role of solvent in SN^1 and SN^2 reactions.	5
13	(a) Define Hukel rule. Write the common properties of aromatic compounds.	5
	(b) Explain theory orientation in electrophilic aromatic substitution.	5
14	Explain the detailed mechanism of Friedal-crafts alkylation and acylation reaction.	10
15	Write Markonikov's rule and predict the products of the following reactions: (a) Addition of HCl to 2-methyl-2 butene (b) Addition of HBr to 1-Butuene (c) Addition of Hl to 2-Butene	10
16	Write the mechanism involved in the following reactions. (a) Michael addition (b) Fries rearrangement	5+5
17	Write the preparation, assay and uses of following compounds. (a) Salicylic acid (b) Benzyl benzoate	5+5
18	Write note on : (a) Kolbe reaction (b) Keto-enol tautomerism (c) Reformatsky reaction	 4 3 3

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