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Name.....

Reg. No.....

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2018

(CUCBCSS-UG)

Chemistry

CHE 4B 04—ORGANIC CHEMISTRY—I

Time : Three Hours

Maximum : 80 Marks

Section A

(Fill in the blanks and one word type questions.)

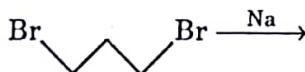
Answer all questions.

Each question carries 1 mark.

1. Isomers formed by rotation about single bonds are called _____.
2. What are the hybridizations of carbons 1 and 2 respectively in the following structure ?



3. The temporary displacement of π electrons to one of the bonded atoms is called _____.
4. Heterolytic fission of C-C bond generates _____.
5. The catalyst used in Friedal-Craft's alkylation is _____.
6. Give an example of a carcinogenic polycyclic arene.
7. The electrophile in aromatic nitration reaction is _____.
8. Baeyer's reagent is an alkaline solution of _____.
9. Write the product formed in the reaction :



10. Write the structure of an anti-aromatic compound.

(10 × 1 = 10 marks)

Section B (Short Answer Questions)

Answer any ten questions.

Each question carries 2 marks.

11. Define metamerism with an example.
12. What is meant by enantiomeric excess ? Calculate the enantiomeric excess of a chiral substance with 70 % of one enantiomer and 30 % of the other.
13. Write the R and S configurations of lactic acid.
14. Draw the most stable conformation of cyclohexane showing all the axial and equatorial hydrogens.

Turn over