S.NO: 435 BATCH: 87-2018 Reg. No.:

END OF SEMESTER EXAMINATIONS, APRIL / MAY - 2019
GENERAL CHEMISTRY-II
SUBJECT CODE: 10UACH02

MAJOR: B.Sc (Chemistry) **SEMESTER : II**
TIME : 3 HOURS **MAX. MARKS: 75**

SECTION – A (10 X 1 = 10)

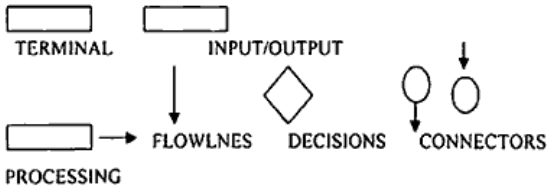
Answer All the questions:

1. Define Interhalogens.
2. Write any two properties of Thiocyarogen.
3. What is Acetylinic linkage?
4. Write the conditions of Acomaticity.
5. Draw the orbital and kekule type structure of Napthalene.
6. In Hofmann's Elimination at what temperature does NaOH decompose to form amines?
7. Write Trouton's rule expression.
8. How many types of Entropy change reactions occur in Ideal gas?
9. What is command in an operating system?
10. Define operators.

SECTION – B (5 X 4 = 20)

Answer All the questions:

11. a) Discuss the structure of F_2O_2
    (OR)
    b) Write the preparation properties and uses of ozone.
12. a) Explain the reduction of alkynes by lindlar catalyst?
    (OR)
    b) Explain the mechanism of Friedel Grafts alkylation.
13. a) What happens when Naphthalene is treated with $Br_2$and HNO_3?
    (OR)
    b) Write the chemical properties and uses of Anthracene.
14. a) Explain the theory of clausius inequality.
    (OR)
    b) Derive the equation for entropy change in isothermal expansion of ideal gases.
15. a) Give the programme to calculate normality value for a given solution.
    (OR)
    b) Draw the flow chart symbols followed to denote various instructions?



SECTION – C (5 X 9 = 45)

Answer All the questions:

16. a) (i) Compare Pseudo halogens with halogens.
    (ii) Write the uses of inert gases.
    (OR)
    b) Write the preparation properties and uses of cyanogen and thiocyanogens.
17. a) Give short notes on (i) IUPAC System (ii) Mechanism of Nitration in benzene.
    (OR)
    b) Give short notes on (i) Benzene Resonance (ii) Diazo coupling Reactions.
18. a) (i) What are the difference between SN^1 and SN^2 Reactions?
    (ii) What is saytzeff's rules? Give evidence.
    (OR)
    b) Explain $E^1$and E^2 mechanisms.
19. a) Calculate the entropy change of an ideal gas with change in P,V, and T where entropy is a function of T and P?
    (OR)
    b) Derive Maxwell's Equation.
20. a) Define Flow chart? What are the levels of flow chart? Write the rules followed while constructing a flow chart?
    (OR)
    b) What is an operating system? List out the functions of an operating system.

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