## END OF SEMESTER EXAMINATIONS, NOVEMBER – 2012. GENERAL CHEMISTRY-II

GENERAL CHEMISTRY-II SUBJECT CODE: IOUACH02

MAJOR: B.Sc. CHEMISTRY

TIME : 3 HOURS

SEMESTER : II MAX.MARKS: 75

### SECTION-A $(10 \times 1 = 10)$

# Answer all questions:

- 1. What are interhalogens?
- 2. Why are rare gases unreactive?
- 3. What is oleum?
- 4. How is sodium acetylide obtained?
- State 'Sayetzeff's rule
- 6. Differentiate substitution reactions from elimination reactions
- 7. What is entropy?
- 8. Write down the Gibbs-Helmholtz equation.
- 9. Give any two examples for input devices
- 10. What do you mean by a joystick?



## SECTION-B (5 X 4 = 20)

Answer all questions:

- 11. a TodicalC at least four uses of inert gases
  - (OR)
  - b) How are the following prepared? (2 + 2 = 4)
  - i) Ozone and ii) Hydrogen peroxide
- 12. a) What is Ozonolysis? Explain

(OR)

- b) Describe the Hydroboration.
- 13. a) Give the various resonating structures of anthracene
  - b) Write a note on neighbowing group Participation
- 14. a) Write a note on the free energy concept.

(OR

- b) State any two different statements of second law of thermodynamics
- 15. a) Draw any flowchart symbols, along with their meanings.

(OR)

b) Write an account of "LINUX".

### SECTION-C $(5 \times 9 = 45)$

Answer all questions:

16. a) Give a detailed account of interhalogen compounds

(OR)

- b) Write an explanatory note on the per acids of sulphur
- 17. a) Explain in detail the resonance phenomenon in benzene

(OR

- b) Describe the
  - i) addition of water to alkynes
  - ii) acidity of alkynes
  - (ii) nitration of benzene
- 18. a) Describe the relative reactivities of different halides howards substitution
  - b) Give an account of aromatic nucleophilic substitution, with suitable examples.
- 19. a) Describe the Maxwall's relationships

(OR)

- b) Give an account of entropy of mixing of ideal gases.
- 20. a) Write a note on i) Algorithm

ii) Programming languages

(OR)

b) What are hard wares and soft wares? Explain.

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