Roll No. _____

SVIS-N-308-A-18

B.Sc. VIth Semester Degree Examination

Chemistry

paper-6.1

(New)

Time : 3 Hours Maximum Marks : 80

Instructions to candidates:

Answer all the three sections

Section-A

I. Answer the following Questions **(15×1 = 15)**

1) What is Coefficient Variation
2) What is absolute error
3) What is post precipitation
4) What is gravimetric analysis
5) What is accuracy
6) Write the structure of quinine
7) What are terpenes
8) What are proteins
9) What are Co-enzymes
10) Write the structure of menthol
11) What are anti stoke lines
12) What is Radiolysis
13) What is meant by selection rule
14) What is meant by zero point energy of a diatomic S H O of vibrational frequency
15) What is meant by electromagnetic radiation

Section-B

II. Answer any **five** of the following questions **(5× 5= 25)**

16) Mention different methods involved in reporting analytical data

17) What are ageing factors which affect the gravimetric precipitation

18) Write the synthesis of Nicotine

19) Classify proteins on composition and molecular shape

20) Discuss the Rotational Spectra of a rigid diatomic molecule

21) Write a note on Radiolysis of water vapor

22) Write a note on concept of Polarizability

Section-C

III. Answer any **four** of the following questions **(4× 10= 40)**

23) a) Describe the methods for minimization of errors **(6)**

b) Discuss the conditions for precipitation **(4)**

24) a) What are the general precautions involved in Gravimetric analysis **(6)**

b) Give the differences between determinate and indeterminate errors. **(4)**

25) a) Elucidate the structure of eitral **(6)**

b) Write the synthesis and importance of Adrenaline **(4)**

26) a) Write a note on

i) Hofmann Exhaustive methylation

ii) Classification of hormones **(6)**

b) Write the biological importance of vitamin-A and vitamin-C **(4)**

27) a) Discuss IR spectrum its energy levels and selection rule of simple Harmonic oscillator **(6)**

b) Write a note on ceric sulphate dosimeter **(4)**

28) a) Discuss basic features of different spectrometers **(6)**

b) Write a note on degree of freedom **(4)**
