

C. U. SHAH UNIVERSITY

Winter Examination-2018

Subject Name : Analytical Chemistry-I

Subject Code : 5SC01ACH1

Branch: M.Sc. (Chemistry)

Semester : 1

Date : 03 / 12 /2018

Time : 02:30 To 05:30

Marks : 70

Instructions:

- (1) Use of Programmable calculator and any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
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SECTION – I

- Q-1** **Attempt the Following questions** **(07)**
- Define analytical chemistry **01**
 - What do you mean by quantitative analysis? **01**
 - What is calibration? **01**
 - Define food analysis **01**
 - Give the name of any five spectroscopic techniques. **01**
 - What do you mean by spectrum? **01**
 - Define wavelength and frequency **01**
- Q-2** **Attempt all questions** **(14)**
- Write a note on spectrophotometer. **07**
 - Discuss the different wavelength selecting devices. **07**
- OR**
- Q-2** **Attempt all questions** **(14)**
- Explain the calibration of UV-Visible spectrophotometer. **07**
 - Write a note on classical and instrumental analytical techniques. **07**
- Q-3** **Attempt all questions** **(14)**
- Explain the Karl-fischer methods for analysis of moisture from food sample. **05**
 - Discuss the chemical methods for the analysis of fiber from food sample. **05**
 - Write a note on the analysis of sodium from food sample. **04**
- OR**
- Q-3** **Attempt all questions**
- Explain discontinues solvent extraction method for the analysis of fat. **05**
 - Discuss the method for phosphate analysis from food sample. **05**
 - Explain Kjeldahl method for analysis of nitrogen from food sample. **04**



